



**A Weekly Journal of Pharmacy and the Drug-trade.**  
ESTABLISHED 1859.

**Head Office: 42 CANNON STREET, LONDON, E.C.**

Telegrams: "Chemicus London." Telephone 852 Bank.

**Branches: ADELAIDE, MELBOURNE, AND SYDNEY, AUST**

#### Subscription Rates.

Ten shillings a year in advance, post free to any part of the world, including a copy of *The Chemists' and Druggists' Diary* next published. Subscriptions may begin any month. Single copy, 4d.; Summer or Winter Number, 1s.; *Diary*, 8s. 6d. Postal orders and cheques to be crossed "Martin's Bank (Limited)."

Prix de l'abonnement annuel: le journal une fois par semaine, et l'agenda une fois par an, 12-60 francs, franco.

Jährlicher Abonnementspreis: die Zeitung einmal wöchentlich, und der Notizkalender einmal im Jahre, 10 Mark, postfrei.

Precio de suscripción anual: el periódico una vez por semana, y el agenda una vez por año, 12-60 pesetas, franco.

The CHEMIST AND DRUGGIST has the largest weekly circulation of any journal addressing the chemical and drug trades of the British Empire. It is adopted as an official journal by eighteen Chemists' Societies in Australia, Ireland, New Zealand, South Africa and the West Indies, and is paid-in-advance circulation in Great Britain and all countries having business relations with this country is intrinsically and numerically unique.

Terms for advertising in THE CHEMIST AND DRUGGIST can be obtained on application to the Publisher at the above address.

#### CONTENTS: Vol. LXXIII., No. 10 (Series No. 1493)

PAGE	PAGE
American Notes .....	401
Association Affairs .....	390
Australasian News .....	376
Births .....	379
Books, New .....	382
British Pharmaceutical Conference .....	389
Business Changes .....	389
Colonial and Foreign News .....	376
Corner for Students .....	370
Correspondence .....	401
Deaths .....	379
Deed of Arrangement .....	378
Dental Notes .....	404
Editorial Comments:	
Mnemonic Matter .....	384
Italian Citric Materials .....	385
Inland Revenue .....	386
Controlling Proprietaries .....	387
Notes .....	387
English News .....	371
French Codex, The New .....	381
French News .....	374
Gazette .....	378
Information Wanted .....	389
Irish News .....	373
Japanese Jottings .....	393
Legal Reports .....	377
Marriages .....	379
Medical Gleanings .....	394
New Companies and Company News .....	378
Notes on Carbograph .....	395
Observations and Reflections .....	383
Optical Observations .....	391
Personalities .....	379
Pharmacie Midy .....	392
Poisonings .....	392
Prescription Problem .....	394
Sage Oil .....	393
Scientific Progress .....	382
Scotch News .....	374
South African News .....	375
Summer Outing .....	390
Tr. Hyoseyami Recentis .....	388
Trade Notes .....	380
Trade Report .....	396
Wills, Recent .....	379

#### "THE CHEMISTS' AND DRUGGISTS' DIARY, 1909."

THIS popular Annual is already in course of preparation, and firms who desire business announcements to appear in it will facilitate the large amount of work in hand by intimating to the Publisher as early as possible the amount of space they desire to be allocated to them. The permanent character of the *Diary*, which is the desk companion of subscribers to THE CHEMIST AND DRUGGIST during the whole of the year, makes it a particularly effective medium for publicity, while the original, unique, and useful "Buyers' Guide" which it contains creates business daily for *Diary* advertisers. The issue for 1909 marks the forty-first year of publication, and will, it is hoped, excel its predecessors in practical utility. Full particulars as regards terms can be obtained from the Publisher, 42 Cannon Street, London, E.C.

### Summary.

The subjoined paragraphs give the gist of the more important matters in this issue, with the object of showing at a glance what has happened during the week. See also "Contents" in the first column.

A SERIES OF FORMULÆ for mouth-washes is given on p. 404.

THE CITRIC-ACID POSITION is a difficult one. It is discussed on p. 386.

WE GIVE some practical notes on the manipulation of carbographs on p. 395.

IMPORTANT DEVELOPMENTS are pending in the German spirit ring, particulars about which are given on p. 400.

MR. E. W. POLLARD has prepared some tincture of henbane from fresh leaves. He gives the factors on p. 388.

THERE ARE INDICATIONS that a revision of the United States tariff may be considered in the near future (p. 387).

PENNY POSTAGE in France is leading, as expected, to an increase in the number of letters sent by post (p. 374).

WE SHOW the difference between an ailment and an affection as recognised by the Inland Revenue Department (p. 402).

MR. ROBERT TOCHER defined the profession of the refractionist at a meeting of the Northern Optical Society (p. 390).

THE LATEST INFORMATION regarding the arrangements for the British Pharmaceutical Conference are given on p. 389.

MR. T. F. HARVEY gives constants for essential oil of sage, an oil which has not often been subjected to analysis (p. 393).

OUR PARIS CORRESPONDENT has interviewed the proprietor of the Pharmacie Midy, the business of which has recently undergone division (p. 392).

THE OPTICAL OBSERVATIONS this week refer to legislation, children's eyesight, frame-measuring, frame-rules, tinted trial lenses, and prices (p. 391).

THE TEXT of the New Zealand Quackery Prevention Bill, which is to give power to regulate the sale of proprietary medicines, is printed on p. 387.

THE TEACHING of applied chemistry in Universities is a subject being considered by the Birmingham Section of the Society of Chemical Industry (p. 371).

SOLUTIONS of some of the more difficult of the problems in pharmaceutical arithmetic that have been given in the Students' Corner are to be found on p. 370.

THE QUESTION of the fatalities from the administration of anaesthetics, which was brought up in Parliament several times, is not to be allowed to drop (p. 388).

THE number of vendors of stamped medicines in Great Britain has increased 819 during the last year. Medicine-stamps have yielded 7,000*l.* more than in 1907 (p. 386).

THE BRITISH ASSOCIATION met this year in Dublin. Mr. Francis Darwin, F.R.S., gave a presidential address dealing with memory in plants. We give some notes regarding the subject on p. 384.

THE PROPOSITION of CHEMICAL-WORKS opened by foreigners owning English patents is much greater than any other class of patent. A sketch of new works erected for Messrs. Meister, Lucius & Brünig, Ltd., is given on p. 372.

SOME NOTES, written after a first glance at the new French Codex, are given on p. 381. We deal particularly with the standardised preparations, and give a portrait of Professor Bourquelot, Secretary to the Codex Revision Committee.

THE PRODUCTION of bromine in the United States continues to increase. Prices last year improved somewhat, but are still barely equal to the cost of production. Further particulars are given on p. 400 concerning the failure of Messrs. Rogers & Pyatt, the well-known New York shellac house.

"XRAYSER" has something to say on the attempts that have been made to obtain legislation for the suppression of the sale of proprietary medicines. He also makes observations on British medicinal plants, historic poisons, and Sir William Ramsay's *obiter dictum* on the transmutation of silver into gold (p. 383).

FLUCTUATIONS in values of drugs and chemicals are mostly slight this week, and include nothing of first-class importance. Copper sulphate, shellac, and cubeb oil are higher; cream of tartar, benzols, antimonial compounds, coconut oil, and quicksilver (seconds) are all easier. Crude China camphor, chamomiles, and cadmium salts are lower (p. 396).

## Corner for Students.

Conducted by Leonard Dobbin, Ph.D.

### SUMMER STUDIES.

#### Pharmaceutical Arithmetic.

By Walter S. Clark, Ph.C., A.C.G.I.

WE give below solutions to a few of the problems which have proved to be the most difficult to students in exercises A and B.

A 6. What weight of concentrated phosphoric acid must be used to make 4 fl. oz. of a dilute acid containing 10 grams of  $\text{H}_3\text{PO}_4$  per 100 c.c.?

10 grams per 100 c.c. is in the same proportion as 10 oz. per 100 fl. oz., or  $\frac{10}{100} = \frac{3}{8}$  oz. per 4 fl. oz.

Hence  $\frac{3}{8}$  oz. (avoirdupois) of real  $\text{H}_3\text{PO}_4$  is required. Since the concentrated acid contains only 66.3 per cent. by weight of real  $\text{H}_3\text{PO}_4$   $\frac{2}{5} \times \frac{100}{66.3} = \frac{40}{66.3}$  oz. = 264 grains are required.

A 8. What volume of B.P. nitric acid will neutralise 1 gal. of liquor potassæ B.P.?

Liquor potassæ contains 27 grams of KOH per fl. oz., or  $160 \times 27 = 4,320$  grains per gal.

From the equation  $\text{KOH} + \text{HNO}_3 = \text{KNO}_3 + \text{H}_2\text{O}$

55.71 grains KOH neutralise 62.58 grains real  $\text{HNO}_3$ .

∴ 4,320 grains KOH neutralise 4,853 grains real  $\text{HNO}_3$ .

But the B.P. acid only contains 70 per cent. real  $\text{HNO}_3$ ,

∴ 4,853 grains real  $\text{HNO}_3$  are contained in  $\frac{10}{7} \times 4,853$

= 6,933 grains of B.P. acid,

and since the specific gravity of the B.P. acid = 1.42

6,933 grains occupy  $\frac{6,933}{1.42 \times 454.5} = 11.16$  fl. oz.

A 10. Calculate the percentage by weight of zinc chloride in liquor zinci chloridi B.P.

64.91 lb. of Zn yield 135.29 lb. of  $\text{Zn Cl}_2$

∴ 1 lb. of Zn yields  $\frac{135.29}{64.91}$  lb. of  $\text{Zn Cl}_2$

and the latter quantity is contained in 40 fl. oz. of solution (sp. gr. 1.53) which weighs  $(1.53 \times 2.5)$  lb.

Hence percentage by weight =  $\frac{100 \times 135.29}{64.9 \times 1.53 \times 2.5} = 54.5$  percent.

B 3. In preparing extractum cinchonæ liqui 10 c.c. of the percolate were found to contain 0.7 gram of total alkaloids. State exactly how you would proceed to make 1 pint of B.P. extract from the percolate.

0.7 gram in 10 c.c. is in the same proportion as 7 oz. per 100 fl. oz., and 5 oz. per  $\frac{5 \times 100}{7} = 71\frac{2}{7}$  fl. oz.

Hence  $71\frac{2}{7}$  oz. must be diluted to 85 oz. with water,  $12\frac{1}{2}$  oz. S.V.R. added, and made up to 100 oz. with water; or,  $14\frac{1}{2}$  oz. must be diluted to 17 oz. with water,  $2\frac{1}{2}$  fl. oz. of S.V.R. added, and made up to 20 fl. oz. with water.

B 8. In preparing oxymel B.P. the mixture of clarified honey and acetic acid was found to be of specific gravity 1.5. What weight of water must be added to 1 lb. of the mixture to produce the B.P. article?

Let  $x$  fl. oz. of water be necessary.

Then  $(x + 16)$  oz. = weight of B.P. oxymel,

and  $\frac{16}{1.5} + x$  fl. oz. = volume of B.P. oxymel,

and sp. gr. =  $1.320 = \frac{W}{V} = \frac{x + 16}{\frac{16}{1.5} + x}$

whence  $x = 6$  fl. oz.

B 4. One litre of liquor ammoniæ B.P. is mixed with 1 litre of acidum hydrochloricum B.P. Find

a. The weight of residue obtained on evaporation.

b. The excess of acid or alkali (as the case may be) by volume.

One litre of liquor ammoniæ (sp. gr. 0.959) weighs 0.959 gram, hence contains 95.9 grams of  $\text{NH}_3$ .

One litre of acidum hydrochloricum (sp. gr. 1.16) weighs 1,160 grams, and contains  $\frac{31.79 \times 1,160}{100} = 368.8$  grams real HCl.

From the equation  $\text{NH}_3 + \text{HCl} = \text{NH}_4\text{Cl}$

16.94 + 31.19 = 53.13

16.94 grams  $\text{NH}_3$  unite with 36.19 grams HCl, and produce 53.13 grams  $\text{NH}_4\text{Cl}$ .

∴ 95.9 grams  $\text{NH}_3$  unite with 204.9 grams HCl, and produce 300.8 grams  $\text{NH}_4\text{Cl}$ .

Hence the HCl is in excess, and the weight of residue obtained on evaporation on a water-bath = 300.8 grams.

Excess of real HCl =  $368.8 - 204.9 = 163.9$  grams, and since 368.8 grams = 1,000 c.c.

163.9 grams = 444.5 c.c.

B 6. Given that 1.65 gram of a sample of ferrum redactum yielded 460 c.c. of hydrogen (measured at  $16^\circ \text{C}$ . and 770 mm. pressure) on solution in an acid, find the percentage of real iron in the powder.

460 c.c. of H at  $16^\circ \text{C}$ . and 770 mm. becomes

$460 \times \frac{273}{289} \times \frac{770}{760} = 440.3$  c.c. at N.T.P.

From the equation  $\text{Fe} + 2\text{HCl} = \text{FeCl}_2 + \text{H}_2$

55.6

55.6 grams of Fe yield 22,320 c.c.  $\text{H}_2$ .

∴ 1.0968 gram of Fe yield 440.3 c.c.  $\text{H}_2$ .

∴ 1.0968 gram of real Fe are contained in 1.65 gram ferrum redactum,

or, the ferrum redactum contains 66.48 per cent. real iron.

#### To Correspondents.

The following are the principal errors occurring in the solutions sent in to Exercises B (the numbers refer to the questions):

(2) The specific gravity of equal parts by volume and not of equal parts by weight was determined.

(3) Complete directions were not given.

(5) The strength of liq. calcis was taken as being  $\frac{1}{2}$  grain of  $\text{Ca}(\text{OH})_2$  instead of CaO per fluid oz.

(6) The volume of gas was not reduced to N.T.P.

BEGINNER.—(5) See above. (8)  $\frac{792}{592}$  does not equal 1.32.

(9) Mistake in decimal point.

J. W. FORD.—(2)  $S = \frac{W}{V}$  and not  $\frac{V}{W}$ . (5) See above. (6) By

taking the weight of a litre of H as 0.09 instead of 0.0896 your answer is 2 per cent. in excess. (10) 5 oz. of sugar =  $5 \times 437.5$ , and not  $5 \times 480$  grains.

A. GREEN.—(4) 34.82 grams of  $\text{NH}_4\text{OH}$  (not  $\text{NH}_3$ ) interact with 36.19 grams HCl. (5) See above.

MAX.—(1) Find the volume of 1,050 grains of water again. (4) Since there is an excess of HCl, the whole of it cannot go to form  $\text{NH}_4\text{Cl}$ . Also you must not neglect the specific gravity of liquor ammoniæ. It only contains 95.9 grains of  $\text{NH}_3$  per litre. (5 and 6) See above. (7) Your method is correct. Simplify  $\frac{1309}{2625}$  again.

A. CRICKSHANK.—(5 and 6) General mistakes above.

E. H. WILLIAMS.—(2 and 5) See above. (4) Read remarks to "Max." (10) Your error is due to the fact that there is not the same relation between grains and minims as there is between ounces and fluid ounces.

J. THOMAS.—(8) If you add 1.46 oz. of water to 1 lb. of the original mixture, 17.46 oz. of material are produced. You have neglected this fact.

POTASH.—(4) See latter part of reply to "Max."

A. MCG. GARDEN.—(1) There are 70,000 (not 700,000) grains in a gallon. (2) See above. (5) You have misconstrued your result.

TETRAD.—(3 and 5) See above. (4) 10 per cent. of 959 is nearer 96 than 95. (10) Weight of product = 7.5 and not 7.

J. S. MURRAY.—(2) How can 1 part by weight of olive oil weigh 0.915? (4) You must take into account the strengths and specific gravities of the liquids mixed. (5) See above.

W. O. F. SINCLAIR.—(2) See above. (5) The whole of the CaO is not dissolved in preparing liq. calcis. (6) Mistake in simplification.

S. H. STROUD.—(5) Lotio hydrarg. flav. is made with  $\text{HgCl}_2$ , and not  $\text{Hg}_2\text{Cl}_2$ . (6 and 10) Errors in simplification.

AGRICOLA.—You have spoiled your record by omitting No. 6.

R. COCKING.—(3) Read the B.P. directions again. (4) The dilute solution of ammonia is ordered.

G. F. SARVIS.—(4) The molecular weight of  $\text{NH}_3$  is 16.94 and not 17.94.

J. SMALL.—Your answers to set A have been identified.

F. BRINDLE.—(3 and 6).—See above. (4) Error in calculation. (10) See reply to S. Meredith.

H. BRINDLE.—(5) See above. (6) Error in calculation.

T. SISTERTON.—(2 and 3) See general mistakes above.

J. B. MACKAY.—(4) The specific gravity of HCl = 1.16 and not 1.6.

FERRUM.—(4) See latter part of reply to "Max." (5) According to equation 56 parts by weight of CaO interact with 269 parts by weight  $\text{HgCl}_2$ . The B.P. lotion contains 5 parts CaO to 20 parts  $\text{HgCl}_2$ . Which is in excess?

H. SEPHCOTT and L. G. SHARP.—Your results are correct.

N. RIDDLE.—(4) 31.79 grams of HCl does not equal 100 c.c.

(6) See above.

CARNOTIER.—(2, 3, 5) See above. (4) The  $\text{NH}_4\text{Cl}$  would not



volatilise if a water bath be used. (6) Error in reducing gas to N.T.P. (9) Simplify  $137 \times \frac{1}{2}$  again.

EDNYFED.—(2) See above. (4) Read latter part of reply to "Max."

J. MEREDITH.—(3) How many c.c. are there in a pint? (5) See above. (10) You have neglected the specific gravity of syrup.

A. S. CROFT.—(1) 1 gal. contains 70,000 (not 7,000) grains. (3) See above. (4) The residue consists of  $\text{NH}_4\text{Cl}$ . (6) Error in simplification.

W. H. COCKTON.—(1) Simplify  $\frac{160}{66\frac{2}{3}}$  again. (3) 1 pint does not equal 640 c.c. (4) 16.94 parts of  $\text{NH}_3$  unite with 36.19 parts of  $\text{HCl}$  (by weight).

C. G. OSTLER.—(2) See above. (5) Your answer is correct, but your reasoning is wrong. You are assuming that liq. calcis contains  $\frac{1}{2}$  grain of  $\text{Ca}(\text{OH})_2$  per fluid oz.

J. PUDDIPH.—Thanks for your note, which is right. Instead of "weight of wax and sinker in air" in Exercise C4 it should have read "weight of wax and sinker in water." This will prove a most interesting exercise in so far as the detection of error by students is concerned.

## English News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

### Brevities.

The crop of peppermint grown on the sewage-farm of the Haverhill Urban Council has been sold at 12s. per cwt., an increase of 2s. per cwt. on last year's price.

Mr. Milner B. Chadwick, chemist and druggist, polled 450 votes to 354 for his opponent at a by-election on August 28 for a vacancy on the Mossley (Lancs) Town Council.

A Croydon butcher was, on September 2, fined 1*l.* 13*s.* 6*d.* for infringing an early-closing order, which fixed the hour of closing butchers' shops on three days of the week at 8 o'clock.

If we may judge from a paragraph which comes to us from Blackburn, there is some little excitement there about the cure of a mill-girl (22) of phthisis by the opsonic treatment; but this is not the first case of the kind.

The National Association of Grocers' Assistants is holding an examination of assistants at the Agricultural Hall, London, N., on September 22. The examination is competitive, the first prize being a fully stocked grocer's shop valued at 500*l.*

An Alfreton grocer named A. J. Smith was, at Marylebone Police Court, on September 2, charged with sending a threatening letter to Mr. T. R. Allinson, physician, 4 Spanish Place, Manchester Square, London, W. Smith was remanded.

A man named Parker, or Davis, a dentist, was, at Gloucester, on September 2, sent to prison for two months for thefts from lodgings. He ascribed his downfall to domestic trouble, and to the fact that the General Medical Council struck his name off the Dental Register.

A meeting of the chemists of the Isle of Thanet is to be held at the Metropole Hotel, Margate, on September 10, at 8.30 P.M. A resolution urging the Pharmaceutical Society to oppose the Poisons and Pharmacy Bill in the House of Commons will be before the meeting for discussion.

Sir William Ramsay has recently stated that it may not be impossible to convert silver into gold by the agency of radium in the same way that copper has been degraded to lithium (see p. 383). Professor J. J. Thomson has also been giving his views on the subject. These are tinged with caution.

Joseph Chapman (50), 69 Bowbridge Road, Newark, committed suicide on August 28 by cutting his throat. Deceased was formerly employed as a porter with Messrs. Taylor & Son, chemists, 38 Market Place, and left three months ago after over twenty years' service owing to a business change, and had since failed to get regular employment.

Richard Gelder and his wife were committed for trial at the Lancaster Assizes on August 29 on a charge of manslaughter of their adopted child, Annie Cookson (*C. & D.*, August 29, p. 339), bail being refused. At the inquest

Dr. Helme attributed death to blood-poisoning consequent on improper treatment of wounds, and the herbalist in attendance (Thomas Millett) was censured for not calling in medical aid earlier.

### Teaching Applied Chemistry.

Sir Oliver Lodge last year invited the members of the Society of Chemical Industry to express their opinion as to the foundation of a Department of Applied Chemistry at the Birmingham University, and he also invited them to give their ideas as to how such a Department should be organised. Mr. H. L. Heathcote, B.Sc., Vice-Chairman of the Birmingham Section, has been commissioned to obtain the views of persons interested in this matter and to present a report to the Section. He has accordingly sent out circulars to all those who occupy professional chairs in chemistry in Great Britain, as well as to many experts and leaders in chemical industry, inviting answers to the following questions:

1. In your opinion is a Department of Applied Chemistry advisable?

2. If it is advisable, what subjects other than chemistry are (a) desirable; (b) requisite?

3. Is specialisation (to suit particular industries) desirable in the University training of applied chemists?

4. If a Department of Applied Chemistry is advisable, how, and with reference to what industries, should the training be carried out?—*c.g.*

(a) At what stage of a chemist's training should specialisation commence?

(b) Over what period should the specialised studies extend?

(c) What degree of specialisation is necessary with regard to the number and kind of professors, and the use of plant for teaching-purposes?

A meeting is to be held in the autumn at which the report will be presented and discussed.

### Store-prices.

The drug department of the Civil Service Supply Association, Ltd., takes up only two pages in the members' circular for September, and prominence is given to: Citrate of magnesia, 1*s.* 4*d.* per lb. bottle; meat and malt wine, 1*s.* 5*d.* and 2*s.* 5*d.* per bottle; desiccated malt-extract, 1*s.* per bottle; glycerine and cucumber, 8*d.* per bottle; bay-rum, 1*s.* 2*d.* per bottle; Carlsbad salts, 1*s.* 3*d.* per bottle; bath salt, 1*s.* 1*d.* per bottle; effervescing saline, 9*d.* per bottle; perfumes, in cut-glass bottles and case, 3*s.* 3*d.* and 5*s.*; special floral brillantines, bottles, 2-oz. 1*s.* 2*d.*, 4-oz. 2*s.*; little liver-pills, tube of 100, 6*d.*; "Prana" sparklet specialties—the improved ozonator, 4*s.* 6*d.*, and the Akustik hearing-apparatus, 7*l.* 7*s.*

*Prices advanced.*—Powdered orris-root, per lb. 1*s.* 1*d.* *Prices reduced.*—Camphor,  $\frac{1}{4}$  lb. 9*d.*,  $\frac{1}{2}$  lb. 1*s.* 6*d.*, 1 lb. 3*s.*; 1-oz. tablets, each 2*d.*, lb. 3*s.* 2*d.*

### Australian Commerce.

Captain R. Muirhead Collins, representative of the Commonwealth of Australia in London, states that the Minister of the Commonwealth Customs Department has under consideration the establishment of an Intelligence branch. The branch will eventually include a museum of Australian products, a sample-room, library of Australian catalogues, and a monthly or quarterly publication.

### Contracts Settled.

Blean (Kent) Rural District Council.—Mr. Greenwood, William Street, Herne Bay, for the supply of disinfectants.

Salford Town Council Gas Committee.—Hardman & Holden, 800 tons of artificial oxide of iron at 18*s.* per ton, and the First Dutch Bog Ore Co., 300 tons of natural oxide of iron at 22*s.* 6*d.* per ton.

The Blackburn Guardians seek tenders for the half-year commencing October 3 for drysalts' sundries, oils and paints, etc., for the workhouse and cottage homes. The tenders should reach the clerk (Mr. C. E. Bygrave) before September 15.

Holborn Union.—At the meeting of the Guardians on September 2 the following tenders were received for the drug-supply for the ensuing six months:—Messrs. Corbyn, Stacey & Co., Ltd., Messrs. Burgoyne, Burbidges & Co., Messrs. Hodgkinson, Preston & King, Messrs. Baiss Bros. & Stevenson, Ltd., and Messrs. Manners & Hopkinson, the last-named tender being accepted at a discount of 46 per cent. off the schedule prices.

#### Sale of Food and Drugs Acts.

The Salford medical officer's report states of 890 samples taken under the Sale of Food and Drugs Acts during the past year, only one-half of 1 per cent. were found to be adulterated.

Mr. J. K. Colwell, F.I.C., of the Chemical Laboratory, Town Hall, Finsbury, London, E.C., has been appointed county analyst by the Bedfordshire County Council, the remuneration being fixed at 52*l.* 10*s.* per annum, with a fee of 6*s.* for each sample analysed. A proposal to appoint Mr. A. E. Ekins, Ph.C., F.I.C., of St. Albans, was rejected.

#### Midland Notes.

There has been quite a run on olive oil in Birmingham lately, due to a periodical recommending it both internally and externally for all sorts of ailments. For instance, one patient was cured of gall-stones by taking a teaspoonful three times a day on the advice of "M.D." in a local paper.

At the Warwickshire Agricultural Show held at Solihull there was a magnificent show of pure honey, the year's yield having been above the average. Prizes were given also for the exhibits of pure wax.

Smethwick, having been raised to a county-borough status, has to appoint a borough analyst. The work is at present being done by Mr. Joseph Lines, F.I.C., the son of a former Mayor and a native of the place, who is likely to be appointed permanently. One of his first official cases was paregoric sine opio, in which the seller was brought to book.

A beautiful stained-glass window has been put in the Great Hall in the University Buildings at Bournbrook. When the British Pharmaceutical Conference visited Birmingham this hall was just on the point of completion, but lacked this crown to its magnificence. The donor of the window is Sir John Holder.

Some time ago a Birmingham pharmacist was asked to report on a case of diseased meat which had been seized, but as he was not *au fait* with the subject he declined. He need not in future, for among an imposing array of subjects to be taught in the coming session at the Municipal Technical College are hygiene, sanitation, and special classes for health inspectors, and the course will include the above. This might prove a good side-line to pharmacy, and timely, for the new line through the corn-growing district of Stratford will bring a larger number of agricultural people to the city, and they will want veterinary medicines and other articles in daily use. Messrs. Southall Bros. & Barclay are setting out a new veterinary department, which they propose to make popular with both pharmacist and farmer.

#### Kola Harmless.

Dr. G. Danford Thomas held an inquest at Paddington, on September 2, on the body of Penelope Whytall Bilton, aged seventy-five, who was, on August 29, found dead at her rooms in Princes Square, Bayswater. On the dressing-table was discovered a note which read: "By mistake I have taken a double dose of my medicine (kola)." Dr. H. Deltell, a medical man boarding in the house, said when he was called to see deceased life had been extinct six hours. Kola is a stimulant, and is not poisonous. Dr. J. Alexander Angus, police divisional surgeon, said that kola is derived from the kola-nut, and is perfectly harmless. He made an autopsy, and found no trace of poison whatever. Miss Bilton had a weak heart, and death was due to syncope. The Coroner: It is curious that she should have written this note.—Witness: She might not have known the properties of kola, and many people who have taken a double dose of medicine of any kind—however harmless—are apt to fear the consequences.—The jury returned a verdict in accordance with the medical evidence.

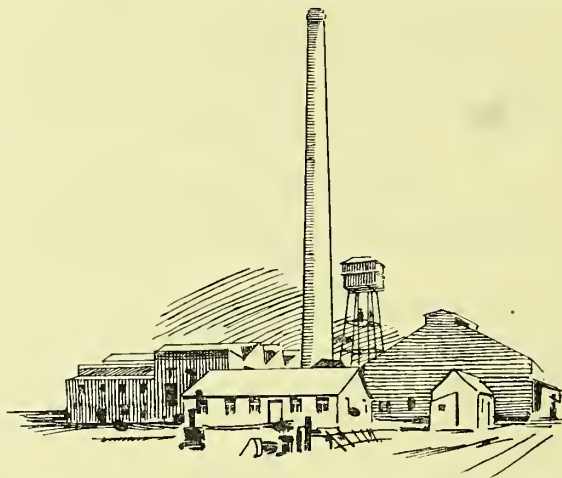
#### Chemical Patents.

Among the foreign firms which have opened, or are about to open, factories in this country for the working of their patents under the new Patent Act, the proportion of those relating to the chemical industries is as ten to one compared with other trades. The patents concern the manufacture of aniline dyes, chemical manures, and synthetic medicines and perfumes. As an indication of the enterprise with which the new Act is being taken up, it is stated that one well-known London firm of agents, which makes a speciality of waterside and inland factory property, has canvassed no fewer than 15,000 firms in France, Germany, Italy, Belgium,

and the United States, in which countries no fewer than 60,000 circulars bearing upon the new legislation and offering advice as to the best location for plant, cost of land and labour, the cost of erecting plant, and a variety of other information have been distributed.

#### English Indigo-works.

The sketch represents part of the first fruits of the Patents Act, 1907—the works of Messrs. Meister, Lucius & Brünig, Ltd., at Ellesmere Port, on the Manchester Ship Canal, near Chester. The constructional work was begun in February, and a large amount of money has been spent on it and a great number of hands have been employed on



the erection of plant, which is at present principally designed for the manufacture of synthetic indigo, so as to conform with the requirements of the Act which came into force on August 28. We understand that the works and their equipment are so well advanced that the manufacture of synthetic indigo actually commenced a fortnight ago.

#### Brighton Notes.

Complete evening courses in pharmacy and dispensing, covering the Minor and Apothecaries' Assistant examinations, commence on September 11, at 8.15 p.m., at the Municipal Technical College, Richmond Road, Brighton. A systematic course of instruction is thus offered to apprentices or assistants for a fee of 5*s.* for the complete course. The teacher is Mr. C. A. Blamey, chemist and druggist, and all particulars may be obtained from him or the principal, Dr. C. H. Draper, B.A.

An invitation was extended by Messrs. Williamson & Co., Wilbury Road, Hove, to several Brighton chemists to see a cinematographic exhibition on August 28, and also meet the Librarian Association then in conference at Brighton. A good audience witnessed a splendid display on the subjects of "Under the Microscope," by Dr. E. J. Spitta, and "In Birdland," by Mr. O. G. Pike, a hearty vote of thanks being returned to the two lecturers for their intensely interesting explanations and for the patience and great work entailed in the collection and preparation of the subjects shown. The demonstration clearly showed the great extent to which the kinematograph can be applied as an educational force. Mr. J. Williamson and his assistants were highly praised for the success they had achieved in kinematographic work as applied to microphotography.

#### Liverpool Notes.

In common with the rest of the country, particularly the manufacturing centres, the Mersey-side has felt the general depression somewhat severely, though chemists, on the whole, do not appear to have been so badly hit as those in other trades. In spite of the "slump," quite a number report an average summer trade, some even an improvement on that of 1907. Employment reports generally afford bad reading, the last to hand gives of a total of 41,000 skilled and unskilled workers, 12,000 unemployed; of 17,000 river-side and dock workers, 8,000 unemployed. The report adds that the worst seems to be over. There are not wanting signs that the general trade of the port is taking a turn for



the better. Within the past ten days some fifteen cargo-boats which have been laid up for months have been chartered for Canadian corn-traffic and new-crop cotton. On the Birkenhead side the shipbuilding trouble did not improve the state of affairs. Work in the yards seems improving, mainly repairs and overhauling. The holiday-resorts on the Wirral Peninsula report a fair season, moderately good business, and generally an improvement on the summer of 1907.

#### Disinfectants Used in Woolwich.

The Woolwich medical officer of health (Dr. Sidney Davies), in his annual report, says that the following disinfectants were used: Jeyes' soap, corrosive sublimate, formalin tablets (for fumigation), formaldehyde (for spraying and disinfecting books and in the mortuary), cyllin (for sputa in phthisis), permanganate of potash and coarse carbolic powder (for dust-pails), and chloride of lime (for off-tins, etc.).

#### Manchester and District Notes.

The lady health visitors are, by their advice, reducing the infant mortality in the densely populated districts of Salford.

A fire broke out on the premises of Mr. Henry Bullock, chemist and druggist, Oldfield Road, Salford, on the morning of August 28, but fortunately the flames were promptly subdued by the fire-brigade before much damage had been done.

The Ashton-under-Lyne sanitary authorities are taking steps to ascertain the purity, not only of ordinary foodstuffs, but of the popular drinks in Lancashire known as herb-beer, dandelion, burdock, sarsaparilla, and other "blood-mixtures." Samples are being taken for analysis by Professor Delepine, of Manchester University.

The premises of Mr. Albert E. Potts, chemist and druggist, 298 Waterloo Road, Cheetham, Manchester, were entered by burglars on August 28. Failing to open the safe, the thieves poured the contents of a large bottle of cod-liver oil over the floor, and emptied a tin of paint into a camera. They decamped with about 3*l.*, obtained by smashing the cash-register till.

#### Birmingham Notes.

Colonel Wyley, V.D., has been selected as lay canon of the Pro-Cathedral at Coventry, and will take a prominent part in the work of the church, having "equal rights" with his clerical brothers and a stall in the choir.

Alderman Keys, of West Bromwich, died recently, leaving a goodly fortune behind. He was a maker of brewers' finings, and drew a pension of 1*s.* 3*d.* a day for sixty-one years as an ex-soldier, and was said by the Army doctor to be incapacitated for further service.

Lord Leigh, of Stoneleigh Abbey, writing to the "Times," fears that the tarring of the roads for the purpose of dust-laying will result in the poisoning of fish, and prophesies a similar result to follow the universal compulsory sheep-dipping by law owing to the poisonous nature of many of the dips used.

#### A Reward for Long Service.

A pleasing and interesting ceremony took place at the fancy-box factory of Messrs. Ayrton, Saunders & Kemp, Ltd., Liverpool, on August 28, being the presentation of a purse of money to Mrs. Hill, the manageress of the round-box department for many years, but who is now retiring. Mr. W. H. Saunders, who presided, briefly sketched the history of the firm from its foundation about forty-one years ago, when work was found for about ten hands, while now the staff numbers over 250. He pointed out that Mrs. Hill had been in constant attendance during the whole of the period without a single break, and had performed her duties in the most exemplary manner. The presentation was made by Mrs. W. H. Saunders, supported by Mrs. S. Adamson, and the meeting terminated with a few remarks from Messrs. S. Adamson, H. Nixon, and Heenan.

#### Sheffield Notes.

Fourteen scalps in eleven days is the record of a local dog-poisoner. His method is to cut up liver impregnated with poison into small pieces and leave them about. The police and numerous dog-owners are anxious to make his

acquaintance. According to report the marauder is now turning his attention to cats.

The members of the Sheffield branch of the National Association of Medical Herbalists held the last botanical excursion of the season on August 27, when they visited Edlington Woods, driving from Doncaster *via* Rossington Bridge and Tickhill. After tea, under the guidance of Mr. Rowley, many botanical specimens were gathered. The return drive was *via* Balby.

The members of the Sheffield Naturalists' Club were unable to hold their meeting, owing to building operations, as arranged, at Hardwick Hall, so they proceeded to that portion of Sherwood Forest between Edwinstowe and Ollerton on August 29. Although nothing of special note was found in bird life, the botanists were well satisfied with their day's work, a good number of specimens of fungi being collected for further investigation.

#### An Unconverted Syphon.

At Weston-super-Mare on August 28, Walter Webber, a carrier employed by Burston & Co., mineral-water manufacturers, was charged with stealing a soda-water syphon, value 3*s.*, belonging to Mr. G. S. Ball, chemist and druggist, 1 Albert Terrace, Weston. Mr. Ball stated that he saw the syphon in a cart being driven by the defendant, and in response to an inquiry where he obtained it from, defendant replied that a servant had given it to him. Witness said that the syphon belonged to him, and told defendant he had no right to take it away. The Bench dismissed the summons, on the ground that there was no evidence of felonious intent or of conversion of the syphon.

#### Cricket.

"Allenbury's" from Bethnal Green scored 62 runs to 34 for six wickets by their colleagues from Ware, at Hackney Marshes on August 29.

Potter & Clarke C.C. *v.* Oxford House.—This match, played at Walthamstow on August 29, resulted in a capital win for the drug-team, V. H. Warrington taking four wickets for 24 runs. Scores: Potter & Clarke, 79 runs for six wickets (A. D. Denton 24 and G. H. Denton 15 not out); Oxford House, 56.

## Irish News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

#### Pharmaceutical Society of Ireland.

The seven members of the Council of this Society who retire by rotation intend offering themselves for re-election. It will, however, be competent to any member of the Society or associate druggist to nominate a candidate. Nominations will be received up to the morning of September 21. The election will take place a fortnight later.

#### The British Association.

The annual meeting of this Association commenced in Dublin on Wednesday evening, when Mr. Francis Darwin, F.R.S., the President, delivered his address. This is the fourth time the Association has met in the Irish capital. The local arrangements are excellent. An ample programme has been published, in which every detail has been arranged for the convenience of members. A special and frequent tramcar service will run from College Green near the Reception-room, which is the Examination-hall, Trinity College, to the section rooms outside the college. The various Section rooms will be connected by telephone, and an inter-sectional motor-service will convey members and visitors in a prescribed round from one room to another. Six of the Sections will assemble within the precincts of Trinity College, and the others are within easy distance.

#### Business Note.

Messrs. Scott & Bowne, Ltd., have appointed Messrs. Johnson Bros., of Dublin and Belfast, as their agents in Ireland for the sale of Scott's Emulsion.

#### Personal Items.

Two well-known members of the trade have just been appointed to serve on the Old-age Pensions Committees in the North of Ireland. Mr. John Baxter, jun., is one of the committee for co. Antrim, and for the County Borough of

Belfast Mr. William McMullan, of the firm of Messrs. Thomas McMullan & Co., wholesale chemists and druggists, Victoria Street, has been selected.

#### Guardians' Affairs.

The Dundalk Guardians have been refused recoupment by the Local Government Board of an item for medicine which amounts to 3s. 10d. The Guardians are not going to bother further about the matter.

The Guardians of the Dromore West Union, Co. Sligo, have complained to the Chief Secretary of the way they are treated by the Local Government Board. Mr. Birrell's secretary has acknowledged the letter.

Sir Charles Cameron, analyst to the Baliothery Board of Guardians, has written to inform the guardians that the bottles containing the samples of drugs from the Holmpatrick dispensary arrived broken. The samples are to be replaced.

The Sligo Board of Guardians have been asked by Mr. T. W. McMurray, who was appointed three weeks ago as temporary dispenser at the Union, when he is to take up his duties. He has been informed that Dr. Denning, whose place he was to fill, has been unable to leave owing to illness in his family.

A sample of acidum phosphoricum dilutum was sent by the Tromestown Guardians for analysis, and was found to be defective. When the matter was inquired into with a view to returning the rest of the drug, it was found that only a small quantity was purchased in the first place, and that half was sent for analysis and the other half used up in preparing medicine.

### Scotch News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

#### Aberdeen and the North.

Mr. John Grant, chemist and druggist, has been elected Hon. President of the Methlick branch of the East Aberdeenshire Liberal Association.

With regard to the reduction of Sunday hours, a few chemists in one district of the city have arranged to dispense with the mid-day hour of attendance.

At a fancy-dress cycle-parade held at Banchory recently, Mr. Blair Lunan, son of Mr. A. Lunan, chemist and druggist, gained the second prize in the comic section.

A gentleman was taken suddenly ill in the shop of Mr. Hugh M. Dugan, chemist, Holburn Street, last week. He was assisted home by Mr. Dugan, but expired almost immediately.

Owing to ill-health, Professor Hamilton, F.R.S., has resigned the chair of pathology in Aberdeen University, to which he was appointed in 1882. He is the son of the late Mr. Hamilton, chemist, High Street, Dundee.

#### Glasgow and the West.

Quite a number of well-known local pharmacists are still on holiday.

The "apprentice question" is still engaging the attention of chemists in Glasgow. Some difficulty is even being experienced in obtaining girl-apprentices.

Police-Judge Armour, at Johnstone, on August 29, sentenced Eliza Young to twenty days' imprisonment for stealing a bottle from a chemist's shop.

A letter appeared in last Saturday's "Herald" asking whether doctors are allowed to leave unqualified persons in charge of their open shops. A shop is referred to in which a girl of twenty years of age is in charge, and she is the fourth that has been in charge of the shop during the past six months.

#### Golf.

Mr. George B. Thomson, son of Mr. R. Thomson, chemist, Elgin, whose golf achievements were noted in the *C. & D.* of July 18, p. 81, has added another trophy to his honours. On August 27 the annual open amateur tournament promoted by the Nairn Club ended in his favour. In the semi-final he beat Mr. A. H. Clarke, of Nairn, by 3 and 1, while Mr. W. Finlay, of Nairn, beat Lieutenant Simson, of the Highland Light Infantry, by 2 holes. During the final a strong head wind sprang up, making play very difficult. Neither man showed such good form as in the

earlier rounds, and Mr. Thomson eventually secured the gold medal by beating Mr. Finlay (who is a son of the ex-Attorney-General) by 3 to 2. Mr. Thomson is eighteen years old.

#### Rats in Colonsay.

Lord Strathcona is the latest important personage to join in the crusade against rats. Colonsay, in the Hebrides, is his, and there the islanders (some ninety families), under skilled supervision, laid down bait made from hundreds of tubes of Danysz virus. Every farm and homestead was systematically treated, and the result is expected to be known soon.

### French News.

(From the "C. & D." Paris Correspondent.)

**FACULTY OF MEDICINE AND PHARMACY.**—The two designs in the competition for the Grand Prix de Rome are published in "La Construction Moderne." The subject of the competition was a building for the Mixed Faculty of Medicine and Pharmacy in Paris, and has already been alluded to in this column.

**THE PRICE OF SERUM.**—At a recent meeting of the Pharmaceutical Syndicate of the Indre Department, it was noted with satisfaction that the prices of 3f. and 6f. respectively no longer figure on the labels of the bottles of anti-diphtheria serum sent out by the Pasteur Institute, thus leaving the pharmacist the option of retailing the vials at the price he considers proper.

**THE "STUDENTS' HOUSE" AND THE STUDENTS.**—The site of the ancient Hôtel-Dieu has been presented by the State and the City of Paris to the Students' General Association, on the condition that they shall thereon erect the "Maison des Etudiants" or Students' Recreative Institute. A first grant of 4,000l. from the State coffers will enable building operations to be shortly commenced. The unsatisfactory feature of this generous gift is that it favours a small section of the students to the exclusion of a large body—the majority, in fact—including the "A.A." (pharmacy students), the Dental Students' Association, the Association of Students of the Institute of Applied Chemistry, the Medical Students' Association, and the Law Students.

**POSTAGE IN FRANCE.**—The penny post in France has now had a fair trial (it was introduced by the law of March 6, 1906), and statistics recently published show that the number of letters and postcards increased from 1,115 millions in 1905 (when the rate was 1½d. per ½ oz.) to 1,366 millions in 1907. The average annual number of letters and postcards carried per head of the population is still only thirty-two, as compared with Germany sixty-three, Great Britain eighty-six, and the eighty-two of the United States. It is fair to add that the French postcard (inland or foreign) has always cost a penny since its introduction in 1873, and that it is consequently likely to be "kilt entirely" by the penny post. Already the annual number of postcards has fallen from 77,000,000 in 1905 to 21,000,000 in 1907, and the picture-postcard industry is now in a serious financial condition.

**SISOWATH AND THE SERUM.**—Sisowath, King of Cambodia, is the most Parisian of Far Eastern monarchs. His stay in the capital is still fresh in the memories of Frenchmen. He has just given a fresh proof of his sympathy with Western ideas in having himself vaccinated against the plague which is now prevalent in his kingdom. Great reluctance was shown at first by certain members of the Royal Family to undergo the preventive operation, but the loss of one of his favourite sons decided the monarch. After he was inoculated he ordered his whole Cabinet to submit to the process, and the Minister of War evinced a most unilitary and abject terror at the sight of the syringe. Next all the princesses and ballet-dancers insisted on being vaccinated, and new supplies of serum had to be obtained from Saigon to satisfy the ladies. One only—the king's daughter-in-law—proved refractory, and she received Dr. Hauer with a well-aimed volley of inkpots. The vaccinator promptly bowed his head to the storm, and escaped the missiles, and Sisowath, laughing hugely at the incident, ordered the lady to be safely isolated in the Palace until such time as she felt inclined to join the ranks of her vaccinated kindred.



## South African News.

(From the "C. & D." Correspondents.)

### Orange River Colony.

MEDICINE IN ONE FORM OR ANOTHER has occupied a prominent place in the Orange River Colony Parliament lately. The Bill to admit foreign doctors and dentists to practise in the Colony was held back owing to the strenuous opposition from those professions, and on being reintroduced several modifications were made, the most important being dropping dentists from it altogether. Much discussion took place over the proposal to introduce a medical tariff into it, and it resulted in an amendment being included making it impossible to sue for more than the "customary fee," which seems like inviting litigation. The Government sustained a defeat in the Upper House owing to the defection of the Hon. and Rev. Dewdney W. Drew, editor of "The Friend," who voted for the amendment proposed by the Hon. Colonel Byron, leader of the Opposition in the Upper House, that the clause requiring the Secretary of the National Hospital to know Dutch and English be deleted. This was consequently carried. The Secretary is Mr. Doel, who qualified as a chemist at the February examination held in Bloemfontein, and who acts as dispenser in addition to his secretarial duties. The manner in which Mr. Doel fulfils the duties of his position was referred to in very flattering terms by members of both parties, and there is little doubt that it was owing to this that the Government suffered defeat on a purely racial question.

THE STAMPS AND LICENCES ORDINANCE.—It is anticipated that this means another attempt to fritter away the chemists' rights. For the information of readers in other parts of the world it may be explained that in addition to the usual medical laws, there exists in this colony a law requiring every person exercising any profession or trade to take out an appropriate licence. The ordinance also requires that proper books must be kept in a European language, the names of the partners must be disclosed, and the licence must at all times be exhibited on the premises. The law operates usefully to check illegitimate trading, but as yet no definition has been given of what the licence of "an admitted apothecary, chemist, or druggist" actually covers. The definition of the general dealer's licence covers the sale of anything for which no special licence is required, and

Every general dealer's licence shall authorise the sale of patent and homœopathic medicines, of the medicines commonly known as "Dutch medicines," and of any article or thing which although used as a medicine is not solely used as such and is not mixed or prepared for use as a medicine, and no licence as an apothecary, chemist, or druggist shall be necessary for the sale of any such articles as are in this section mentioned.

From this it appears evident that the sale of drugs is entirely restricted to those holding a licence as an apothecary, etc., but whether the contention raised by the Medical and Pharmacy Council "that the preparation of a patent medicine is the act of an apothecary, etc., and requires a licence as such" will be upheld remains to be seen.

PROPRIETARY MEDICINES BILL.—"The Friend" of August 7 contained an editorial on this subject, the result of an interview between the Editor and the President of the Pharmaceutical Society of the Orange River Colony, which practically withdraws a good deal previously appearing in that paper with reference to the chemists and the Bill, and gives a very fair and unbiassed statement of the position of affairs. The following passages are interesting:

The chemists of this Colony are, as a class, in favour of legislation which will regulate the sale of patent medicines. Their opposition to the Bill was based purely on the unworkableness of some of its proposals.

The necessity for legislation remains, but it must be legislation which aims at regulating rather than suppressing the sale of patent medicines.

Like most other things, patent medicines have their good qualities.

To pass a law to which the proprietors would not submit would simply be to deprive the people of this Colony of certain well-known remedies which are used the world over.

Unquestionably the secret medicine is, as such, an evil, but is it less an evil than to lack the medicine altogether? Seeing how empirical medicine is, should we know much

more than we already know about the operative method of these secret medicines if we knew the formulæ?

These are some of the matters which call for expert advice as a prerequisite to legislation.

Perhaps the Government will be able, in the interval before the next session, to take counsel of the chemists and physicians and frame a new Bill accordingly.

Nothing more has occurred in the matter to date, and it is unlikely that any definite steps will be taken in drafting a new Bill until after the close of the present Session of Parliament. The history of the Bill is thus related:

The measure was drafted by Dr. Pratt Yule at the request of the Government, but with the idea that, before being gazetted, it would be submitted for emendation to a committee of practical doctors and chemists. As Dr. Pratt Yule conceived his responsibility, he had no more to do than to prepare a rough model on which other hands might work. As it happened, the Bill got gazetted (probably by an office mistake) before it could be submitted to any council of experts, and hence it has happened that the public and the Press have been criticising not the deliberate scheme of either Dr. Pratt Yule or the Government, but a merely provisional draft.

### Transvaal.

MR. A. W. VENTHAM, who until recently had carried on a chemist's business in Bree Street, Johannesburg, has been appointed dispenser and secretary to Hartley Hospital, near Salisbury, Rhodesia. He has the good wishes and congratulations of numerous friends in the Transvaal upon taking up his new appointment.

"MEDICINAL PILLS."—Ah Ching had purchased some opium and strychnine pills. As a sequel he was charged, before Mr. Jordan at Johannesburg, with being in possession of false permits and certificates, and with endeavouring to obtain opium on those certificates. The Assistant Government Analyst stated the composition of the pills, and gave it as his opinion that these pills are taken by the Chinese to help them to overcome the opium-habit. The case was remanded.

PRETORIA PHARMACIES came in for a nasty little hit from "Citras" in a local paper on August 7. "How is it possible," he asked, "that last night and this morning I found four pharmacies in the sole charge of young white boys and kaffirs?" To this another correspondent replied that it is too much to expect that a qualified chemist must be imprisoned in his shop, be deprived of meal-times, and even not be permitted to leave his place for a moment. He then put some pertinent questions about the legal responsibilities of chemists, and added:

In the Transvaal a chemist is not protected at all, and having all these responsibilities he is placed on the same footing as an ordinary tradesman. For instance, in Pretoria, in all grocery shops, patent medicines, Dutch medicines, sheep-dips, and other lines specially belonging to the chemist's profession are sold freely; a certain firm dealing in stationery is selling all toilet articles, and there is besides a free dispensary, which is supplying medicines to everyone.

The letter concluded with the remark that the sixteen chemists' shops in Pretoria find it very hard to meet both ends under these conditions.

TOBACCO SHEEP-DIPS.—In the House of Assembly, Pretoria, last month, Mr. Bezuidenhout asked the Minister of Agriculture whether, in view of the extensive and increased use of tobacco-extract as sheep-dip, and the large sums of money lost to the Colony by importing it, the Government intend to establish a tobacco-extract factory, in order that this article may be supplied at a low price to sheep-farmers to enable them more effectively to eradicate scab? General Botha, in reply, said sheep-dips manufactured from tobacco are excellent for the eradication of scab in sheep, and the nicotine has no deleterious effect on the wool; but experiments conducted by the chemist of the Department of Agriculture prove that the amount of nicotine in Transvaal tobacco is rather low, and the process would therefore prove somewhat expensive. In any case, the Government do not consider it desirable to establish a factory for the production of sheep-dip, as the matter is one which they consider could better be undertaken by a private company. If desired, the Government is prepared to place the advice of its experts at the disposal of such a company.



## Colonial and Foreign News.

**DENTISTS IN THE GERMAN ARMY.**—The German Government intends turning to profit the acquired knowledge of the qualified dentists undergoing their term of military duty. Those who wish, will in future be admitted to attend to the duties of a military dentist in the garrison hospitals during the last quarter of their year's military training, provided they have obtained the rank of lance-corporal or corporal.

**EXPLOSION IN A PERUGIAN PHARMACY.**—"Il Messaggero" for August 21 gives a detailed account of the explosion in an English pharmacy at Perugia (*C. & D.*, August 29, p. 346). The proprietor (Signor Binni) and his unfortunate assistant Giulio Palmerini are both Italians. Palmerini was mixing antimony, sulphur, chlorate of potassium, and charcoal in a mortar, during the absence of his master, with the object of making explosive bombs to take fish, and it is supposed that the inexperienced operator used too much vigour while mixing the sulphur and potassium chlorate, causing thereby an explosion which killed him.

**CHEMIST HELD IN RANSOM.**—Signor Sapio, a prosperous Palermo chemist, while going to spend the week-end at his country villa at Licata, was kidnapped by a band of Mafia highwaymen, who sent a deputation to his wife demanding a ransom. The terrified lady, on being given to understand that in the event of the ransom not being forthcoming her husband would be shot, produced the keys of the safe, which was speedily despoiled. Having also taken the lady's jewellery the bandits decamped, after drinking their hostess's health in champagne. Some hours later Signor Sapio reached home, having been relieved of his revolver, gold watch, rings, and bank notes, and almost denuded of his clothing.

**GERMAN PHARMACISTS' HOME.**—The construction of the new society hall for German pharmacists has been commenced in the Levetzow Strasse, Berlin, the work being controlled by a limited company formed exclusively of pharmacists and of their associations. The building is intended to provide a home for the Commercial Company of German Pharmacists, the German Pharmaceutical Association, the Berlin Pharmaceutical Association, and the Pharmaceutical Society. After having provided accommodation for these the remainder of the rooms have for the most part been let to firms who have constant business relations with pharmacists. It is proposed to establish a permanent exhibition of pharmaceutical articles on the premises.

**OPIUM AND MANCHESTER GOODS.**—Will the suppression of the opium-trade in China have a prejudicial effect on the demand for Manchester goods? is a question which suggests itself after reading the British Consul's report on the trade of Wuchow. He reports British trade in manufactures as unsatisfactory last year, one of the causes of decrease being the loss of financial facilities. Formerly a large trade was done in opium, and the opium-dealers were in a position to negotiate bills of very large amounts payable in Hong-Kong or Fatshan. But now the opium-trade has fallen off, and the Fatshan bankers, who are the chief financiers of the trade of Wuchow, refuse to make such free advances to merchants as in former years. The loss of this facility in remitting is a matter for consideration in its bearing on the importation of Manchester soft goods.

**ASSISTANTS' SALARIES IN AUSTRIA.**—There is at present a movement on foot amongst Austrian apothekers to do away with the customary method of fixing an assistant's salary by private agreement, and to replace this by a tariff system. To enforce this plan, a society has been formed under the title of "General Austrian Apothekers' Salary Fund." This will enable an assistant to enjoy the same advantages when working for any of the members of the society. The idea is to pay a fixed salary of 6*l.* 14*s.* a month, to which will be added, according to the local rate of living, a sum varying from 8*s.* 4*d.* to 33*s.* 4*d.* It is intended to increase the salary by fixed amounts, which have not yet been agreed upon. If an assistant should remain for five years with the same employer, this time will be counted as six years in calculating his increase of salary.

## Australasian News.

The fullest information regarding the Australasian drug-trade and pharmacy is given in "The Chemist and Druggist of Australasia," copies of which can be obtained at 6*d.* each, post free, from the office of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

### New South Wales.

**BEESWAX CASES.**—Charges are being brought against three chemists in Sydney of having sold beeswax as a drug not in accordance with the Health Act. The first case was down for hearing on July 22, but the hearing was postponed until July 29. A question that will have to be decided is whether beeswax is a drug.

**DISPENSING BY DOCTORS** was practically universal in Newcastle until recently, when Mr. R. Donald opened a city pharmacy convenient to the offices of Drs. Nixon and Beeston, for the purpose of dispensing for their patients; and Mr. F. W. J. Fletcher, of Hunter Street, W., has commenced the dispensing of medicines for Dr. Lealie.

**POISONS BILL.**—The Pharmacy Board has submitted to the Government a draft Bill for the regulation of the sale of poisons. On June 27 it was officially stated that the Bill had not yet been considered, and might not be one of the items included in the Government programme for next Session. The draft provides that persons engaging in the sale of poisons must obtain an annual licence, for which a small fee will be charged, exception being made in this respect in the case of the dispensing of the prescriptions of duly qualified medical practitioners. It is proposed absolutely to prohibit the sale of opium for smoking, and provision is made for the labelling of all poisons, while all bottles containing poison must be of a distinct colour and shape.

### New Zealand.

**FEDERATION.**—The constitution and rules of the New Zealand Chemists' Federation have been adopted (see *C. & D.*, August 1, p. 190). The votes granted to each affiliated association have been fixed at one vote for any Association having less than twenty members, instead of less than ten members. The Executive is to be elected from the members of the local Associations in the district in which the annual meeting is held. The Executive is to meet once a month, and new rules or amendments are to be made at the annual meeting or a special meeting convened for the purpose.

**THE SECRET COMMISSIONS BILL** was read a second time in the House of Representatives on July 3. Members inquired if it would deal with the rebates on insurance and shipping which enable big companies to make it worth while for their customers to remain with them in spite of very tempting offers from competitors. The Premier was also asked if he was satisfied that the Bill dealt with the class of secret commissions known as the "American bet." The Premier did not know what that was, and it was explained as follows: Suppose you had a contract to let, and I came along to you and said, "I am putting in for it. I am prepared to bet you 5,000*l.* to half-a-crown that I do not get it." This class of secret commission, it was declared, is rampant and ought to be put down. The Premier promised to look into the matter.

### Victoria.

**GROCERS AND POISONS SALE.**—The case in which a grocer was prosecuted for the sale of poison (*C. & D.*, August 29, p. 345) was not an isolated one. On July 20, at Footscray, William Shaw, jun., grocer, trading as J. & W. Shlaw, was charged with having sold Fellows' syrup on two separate occasions. Mr. E. R. C. Peters, analyst, said the syrup contained strychnine. Eight tablespoonfuls would constitute a fatal dose. Defendant said that he had acted in ignorance and should have received some warning notice from the Board. The Bench inflicted a fine of 40*s.*, with 3*l.* 8*s.* 6*d.* costs.

**DURING 1907** the imports of drugs and chemicals into Santos, Brazil, amounted to 2,737,372 milreis, against 1,968,898 milreis in 1906; the imports of perfumery, essences, paints, and varnishes amounted to 2,173,616 milreis, against 1,722,719 milreis. (Milreis = about 1*s.* 3*d.*)



## Legal Reports.

### Medicine-stamp Act, 1812.

#### DURANT'S HERBAL PILLS.

At the North Holland Sessions, held at Boston on August 26, Charles Durant, patent-medicine vendor, Boston, was summoned, at the instance of the Board of Inland Revenue, on four counts, for selling Durant's herbal pills unstamped and without a licence. Mr. E. Bowden, supervisor of Inland Revenue, Boston, conducted the prosecution, and two Inland Revenue officers testified to purchasing sixpenny boxes of the pills at defendant's stalls at Grantham and Sleaford. On the stalls a placard with the words "Durant's herbal pills" was exhibited. The defendant is an old gentleman of eighty-one, who until recently was an alderman of the Boston Corporation. He stated in evidence that for fifty-three years he had been in the habit of compounding and selling pills. Those that were sold in his own and chemists' shops were stamped and wrapped as required by law, but those for the market were simply pills, without any description upon them or statement as to what they would do. He had sold in this manner at Grantham and Sleaford for eight years, and if anything was wrong about it he thought he should have been informed before. He claimed no proprietary right in these pills offered on the market, and did not say what they would do, and therefore held that he was not liable. He admitted that there were placards on his stalls announcing "Durant's herbal pills," which were a proprietary medicine, but he denied that those pills were sold at Grantham or Sleaford. The Magistrates found the charges proved and fined defendant 2*l.*, and costs, in each of the first two cases, and 1*l.*, and costs, in each of the second two cases—in all 7*l.* 12*s.*

### Dentists Act.

#### TOOTH SPECIALIST.

At Birmingham, on September 2, Harley Lord, Mary Street, Balsall Heath, was summoned at the instance of the British Dental Association for holding himself out as especially qualified to practise dentistry. Lord advertised himself as a "tooth specialist." He was fined 5*l.* and 5*s.* costs.

### Sale of Food and Drugs Acts.

#### FORMALDEHYDE IN MILK.

JAMES GORDON, a registered milk-dealer in Manchester, was last week convicted by the Stipendiary Magistrate of that city and fined 20*s.*, and costs, for having sold milk which contained formaldehyde to the extent of two parts in every 40,000, or double the proportion recognised by the Home Office as innocuous. This proportion (which was certified by Mr. Estcourt, the city analyst) was declared by Dr. Hutchinson, the assistant medical officer of health, to be injurious to health.

#### MALT VINEGAR.

At West Ham Police Court on September 2, Mary Grimshaw, a general dealer, of Sussex Street, Plaistow, was summoned for selling as malt vinegar vinegar proved to be not malt vinegar. Messrs. R. White & Sons, Ltd., mineral-water manufacturers, of Neate Street, Camberwell, were summoned for selling vinegar to the prejudice of the consignee, and Josiah Bentley, a carman in the employ of Messrs. White, at Saxon Road, Ilford, was summoned for a similar offence.

Mr. W. W. Webb represented Messrs. White and Bentley. Evidence was given that on June 15 an assistant to Dr. Sanders, the prosecutor, purchased "a pint of malt vinegar" at Mrs. Grimshaw's shop. The vinegar was certified by the analyst as not made from malt. In consequence of this Inspector Warwick made arrangements with Mrs. Grimshaw, who ordered from defendant Bentley a barrel of malt vinegar. A couple of days later Bentley delivered the vinegar, and Mrs. Grimshaw, in the inspector's presence, asked him: "Is this my malt vinegar?" Bentley said "Yes," and the inspector took a sample for analysis. Bentley then said: "You will find it up to standard, but it is not malt vinegar; it is wood vinegar." The inspector pointed out that he had given Mrs. Grimshaw a bill read-

ing: "White-Cottell's Pure Malt Vinegar," and he then said, "Yes, if my firm knew it I should get the sack." This vinegar was also found not to be malt vinegar. For the defence it was urged that when Bentley first sold Mrs. Grimshaw vinegar he was asked for some bills to advertise it, and instead of giving one reading "strong vinegar" he gave the pure malt vinegar bill. A bill reading "Improved wood vinegar" was fixed on the head of each cask of wood vinegar. Mr. Webb called the foreman of Messrs. White's branch business, and he said every precaution was taken to avoid mistakes. Mr. Ratcliff Cousins said there was no evidence that Messrs. White were in any way parties to Bentley's deception. He was satisfied that Bentley had sold the vinegar as malt vinegar to obtain custom. His Worship ordered Messrs. White to pay a fine of 2*l.* and costs, and Bentley to pay a fine of 2*l.* Mrs. Grimshaw was not convicted.

#### CAMPHORATED-OIL WARRANTY.

At the Brentford Petty Sessions on September 3, Mr. Montague Sharp presiding, Messrs. Auburn & Heaviside, of 73 and 75 Newington Causeway, London, S.E., were summoned for having on June 20 given a false warranty to Archie Bernard, general grocer, 169 Linkfield Road, Isleworth, respecting small bottles of camphorated oil. The information was laid at the instance of Mr. Walter Tyler, assistant inspector under the Foods and Drugs Acts, of the Middlesex County Council. On July 30 Mr. Archie Bernard was summoned for having sold camphorated oil deficient in camphor to the extent of 11.75 per cent. Mr. Bernard intimated, prior to his appearance in Court, that he should rely for his defence upon the warranty issued by Messrs. Auburn & Heaviside, from whom he purchased the article in question, the firm supplying it as the "Defiance" oil. It was sold in penny bottles exposed on a card which bore the words "Made according to the formula of the British Pharmacopœia, guaranteed pure." The information against Mr. Bernard was dismissed and a summons issued against Messrs. Auburn & Heaviside. Mr. Richard A. Robinson, chief inspector under the Weights and Measures Act and the Food and Drugs Acts, for the Middlesex County Council, was present. Mr. Walter Tyler conducted his own case, and Mr. Wilfrid Firth (solicitor, Brentford) appeared on behalf of the defendants, and while admitting the accuracy of the analyst's certificate on which the case was founded, contended that the warranty issued by his clients was an accurate one at the time the article to which it applied was sold.

The case having been formally opened by Mr. Tyler, Mr. Archie Bernard gave evidence of having sold the camphorated oil to the inspector. He said there were some oil-stains on the card to which the bottle was fastened. Evidence of purchase was also given. Mr. Edward Bevan, public analyst, in the course of his evidence said that he was prepared to pledge his professional reputation that the deficiency in the camphor could not have been caused by the leakage from the bottles. Even although the corks had been taken out of the bottles, it would have taken a very long time before the quantity of camphor got down to the low percentage he had certified. For the defence Mr. James Smith Binnie, manager of the drug department of defendants' business, stated that in preparing the small bottles the firm used camphor in the proportion of 11 lb. to 4 gals. of olive oil, the B.P. proportion being 10 lb. He described the process of packing, and added that the gelatin process of sealing was preferred to the use of wax. He was not a pharmaceutical chemist, and could not therefore dispute the opinions of authorities which were quoted as to what camphorated oil should consist of. Mr. Heaviside, in his evidence, said his firm had been in business for twenty-two years, and in that time had never once been prosecuted. If there was a leakage of the oil in the bottles sold by Mr. Bernard, he contended there must be a waste of the volatile properties. The Chairman said the case was one in which the Magistrates could not avoid convicting. He described the expert opinion of Mr. Bevan as being second to none in England. If there had been a fault in the corking of the bottles the blame rested with defendants. The bench would therefore impose a fine of 40*s.* and costs. Mr. Firth asked that the defendants should be let off on payment of costs and without a conviction.

The Chairman said the bench could not grant that request.



## Deed of Arrangement.

THAUSE, ABRAHAM, trading as Edward Goldsmith & Co., 7 Dysart Street and 33 New Inn Yard, Shoreditch, and residing at 45 Princes Square, London, Druggists' Sundriesman.—Trustee, S. P. Child, 42 Poultry, London, E.C., chartered accountant. Dated August 18. Filed August 25. Liabilities unsecured 6,000*l.*; estimated net assets 550*l.*. The following are among the creditors: Powell & Barstow, Ltd. (15*l.*); Chas. Windschuegl & Co. (19*l.*).

## Gazette.

### Partnerships Dissolved.

BRADLEY, R., TROUGHTON, A. J., and HARDIE, F. C., physicians, Bentham, Yorkshire, under the style of Bradley, Troughton & Hardie; so far as regards F. C. Hardie.

GARDINER, B. H. J., REYNOLDS, E. J., and KIRTON, C. I., physicians, etc., Mount Adon Park, Dulwich, Gloucester House, Barry Road, East Dulwich, and Ashville, Honor Oak, London, S.E., under the style of Drs. Gardiner, Reynolds & Kirton; so far as regards B. H. J. Gardiner.

## New Companies and Company News.

E. H. RICHARDS (SOUTHELD), LTD.—Private company. Capital 700*l.*. Objects: To acquire the business carried on at 124 High Street, Southend, by E. H. Richards, Ltd., as dental operators and mechanics. The first directors are E. H. Richards and W. J. Constable. Registered office, 124 High Street, Southend.

JEFFREYS, MILLER & CO., LTD.—Private company. Capital 2,000*l.*. Objects: To carry on the business of chemists, druggists, oil and colour men, etc. The directors are: J. Jeffreys, Gawthorpe View, Blackburn, manufacturing chemist, and J. Miller, 8 Church Street, Adlington, solicitor. Qualification 25*l.*. Remuneration, 120*l.* per annum. Registered office, Chorley Road, Adlington, Lancs.

ORME & CO., LTD.—Private company. Capital 8,000*l.*. Objects: To acquire the business of manufacturers and importers of chemicals, chemical apparatus, etc., carried on by H. Scheffer and A. C. Orme, as "Orme & Co.," at Manchester and Liverpool, and to carry on the same and the business of manufacturers of electrical, physical, and photographic apparatus and druggists' sundries, etc. The first directors are: A. C. Orme, 17-19 Russell Street, Manchester, chemical-apparatus manufacturer; J. W. W. Openshaw, 7 Darwen Street, Blackburn, chemist and druggist; and G. Mackay.

NOBLE'S DRUG STORES, LTD.—Private company. Capital 1,000*l.*. Objects: To adopt an agreement with W. D. Noble and to carry on the business of chemists, druggists, dealers in photographic requisites, etc., as formerly carried on by him at 2 Wells Street, Cable Street, E., as "Noble's Drug-stores." The first directors are W. D. Noble, H. H. Jowett, and H. J. Curtis, each of whom may retain office while holding one share. Qualification of ordinary directors ten shares. Remuneration (except managing director, if any) 5*l.* per annum, divisible. Registered office, 2 Wells Street, Cable Street, E.

QUININE BITTERS MANUFACTURING CO., LTD.—The final meeting of the old company has been held at the offices of the company, Mincing Lane, Llanelly, Carmarthenshire. The liquidator (Mr. Thomas Gee) submitted a statement of accounts showing the manner in which the winding-up had been conducted, and how the property of the company had been disposed of. Resolutions were passed adopting the statement of accounts and the report of the liquidator.

MORNY FRÈRES, LTD.—Mr. Justice Joyce granted, on July 21, the application of Mr. Fielding for the appointment of Mr. Harold M. Barton as receiver and manager of this company, trading as chemists in Bond Street and Regent Street, London. The company was formed in June 1905 to acquire from Mr. S. F. Goss, chemist and druggist, the business started by him at 110 New Bond Street, W., as Morny Frères. The nominal capital is 20,000*l.*, of which 13,508*l.* was issued, the first directors being Messrs. S. F. Goss, J. Reeves, and H. J. D. Clark. A meeting of the creditors was called last week at the offices of the Institute of Chartered Accountants by the liquidator (Mr. Baker, of John Baker &

Sons, accountants, Billiter House, E.C.), when a statement of the affairs was submitted and the position was freely discussed. Mr. S. F. Goss was not present, owing to illness certified by his medical attendant. The statement of affairs showed that the liabilities comprised a mortgage of 5,000*l.* on the lease held by the Legal and General Life Assurance Society, debentures of 8,500*l.* held by Mr. Fielding, and others of 3,000*l.* issued since the Court proceedings to carry on the business. There are also bills amounting to over 806*l.*, and the debts due to trade creditors amount to 4,756*l.*. The estimated assets include lease of premises and goodwill, 13,000*l.*; stock, 6,818*l.*; fittings and furniture, 4,380*l.*; capital reserved, 1,501*l.*; cash, 293*l.*; debtors, 1,118*l.*; loan from Mr. Goss, 681*l.*; and other items (2,769*l.* and 1,381*l.*). After a full discussion it was suggested that a small committee should be appointed to consult with the liquidator as to carrying on the business, and ultimately Messrs. Hall (Allen & Hanburys, Ltd.), Gower (Butler & Crispe), Pullman (printer), and Roe (Parkinson & Sons) were appointed.

Re HOWARD & CO., LTD., 4 The Parade, Watford, Chemists and Chemical-manufacturers.—As reported in the *C. & D.*, August 1, p. 194, Judge Rowland Williams granted, on July 19, a compulsory order to wind up this company. The petition was lodged by Messrs. Davy Hill & Hodgkinsons, Ltd. A statement of affairs has now been issued, and discloses liabilities amounting to 3,360*l.* 4s. 2*d.*. After deducting preference claims and loan on debenture bond the assets are *nil*. As regards contributories, there is a total deficiency of 4,367*l.*. The failure of the company is said to be due to general depression of trade and losses incurred at Reading. The company formerly carried on business at 25 Hill Street, Richmond, at 67 Broad Street, Reading, as well as at Watford. The directors of the company were at one time Mr. John Egbert Griffiths, Mrs. Kate Griffiths, Mr. Frank Rice (since deceased), Mr. Thomas Allen, Mr. William Wilberforce Trich (since deceased), and Mr. Henry Percy Burrell. Five debentures of 500*l.* each have been issued in favour of Mr. R. H. Fremlin, of Watlingtonbury, Kent, for the development of the business and to meet pressing liabilities. Mr. J. E. Griffiths has been appointed by Mr. Fremlin as receiver on his behalf, and this appointment was confirmed by the Court on June 2, 1908. The company has, since the end of 1905, been unable to meet its liabilities as they became due, and the officials became aware that the company was not in a position to discharge its debts in 1906, and certain debts have been contracted by the company since. The following are creditors: Butler & Crispe, London (226*l.*); Butcher & Sons, London (10*l.*); Bromet & Co., London (131*l.*); Burgovne, Burbidges & Co., London (12*l.*); Cresswell, London (11*l.*); Davy Hill & Hodgkinsons, Ltd., London (290*l.*); J. Farina, Cologne, Germany (10*l.*); D. & W. Gibbs, Ltd., London (32*l.*); Houghtons, Ltd., London (39*l.*); Hovenden & Sons, London (15*l.*); Idris & Co., Ltd., London (51*l.*); Jones & Co., London (10*l.*); Kodak, Ltd., London (19*l.*); J. E. King, Watford (10*l.*); Morny Frères, London (20*l.*); Meggeson, Ltd., London (19*l.*); Potter & Sons, London (21*l.*); H. Quelch, London (15*l.*); Spurway & Co., London (40*l.*); Schutze & Co., London (12*l.*); Shirley Bros., London (10*l.*); V. Wood, London (10*l.*). The first meeting of creditors was held last week at the Official Receiver's office, 14 Bedford Row, W.C., before Mr. Garton, assistant Official Receiver. Mr. Garton having dealt with the proofs, said he was afraid that the estate was not a very promising one, for the debenture-holders would take all there is. After a long discussion, and having regard to the fact that the Receiver for the debenture-holders had already been appointed, it was resolved that the Official Receiver do not apply to the Court for the appointment of an independent liquidator.

MORTGAGES AND CHARGES.—Particulars of the following debentures have been registered: *British Photo Paper Co., Ltd.*, London, 5,000*l.*; issued 350*l.*—*J. Hulme & Co., Ltd.*, chemists, Oldham, 1,000*l.*; the whole issued August 21.—*Lewis Contracts, Ltd.*, chemical manufacturers, etc., London, 100*l.* on August 18 to H. C. Rigaud, 21 Regent Street, S.W. The following do not refer to fresh issues, but to total amounts of mortgages and charges outstanding on July 1 and now filed according to law: *Apollinaris & Johannis, Ltd.*. Charge on shares in allied companies dated March 25, 1897, securing 850,000*l.*—*Bell, Sons & Co., Ltd.*, chemists, Liverpool. Mortgage dated July 23, 1907, securing 600*l.*—*Henry Pritchard & Co., Ltd.*, oil and chemical manufacturers, Bristol. Trust deed dated 1890 and debenture (collateral security) dated 1893, securing 18,000*l.* debenture stock.—*Timothy White Co., Ltd.*, chemists, Portsmouth. Mortgage dated March 25, 1906, securing 1,000*l.*—*Yardley & Co., Ltd.*, soapmakers, London. Mortgage dated December 8, 1904, securing 4,400*l.*—*Perrins, Ltd.*, chemical manufacturers, Warrington, 20,000*l.* debentures. Issue, 750*l.*. Holder: Sir P. C. Walker, Bart., Osmaston Manor, Derby.—*David Smith & Co., Ltd.*, chemists, Halifax. Mortgages, etc., 1883 to 1906, securing 16,663*l.*



## Births.

**DE MORGAN.**—At 19A Firs Mansions, Muswell Hill, N., on August 31, the wife of F. Filmer De Morgan, Ph.C., F.C.S., of a son.

**FROST WOOD.**—At 132 Dame Agnes Street, Nottingham, on August 27, the wife of W. Frost Wood, chemist and optician, of a son.

## Marriages.

**HASLEGRAVE—TETLEY.**—At Wakefield Cathedral on September 1, by the Ven. Archdeacon Donne, Edward Ernest Haslegrave, chemist, Hunslet, Leeds, to Carrie, daughter of the late Mr. George Tetley, of Manchester.

**SPRINGBETT—MABEN.**—At Herne Hill Congregational Church, London, on August 29, by the Rev. W. Adamson, D.D., Glasgow (grandfather of the bride), assisted by the Rev. John Farren, Charles Wafforne Springbett, to Jessie, elder daughter of Mr. Thomas Maben, F.C.S., pharmaceutical chemist.

**TOMLINSON—BARLOW.**—At the Wesleyan Church, Poulton-le-Fylde, on August 26, by the Rev. G. H. McNeal (cousin of the bridegroom), assisted by the Rev. T. Heppell, of Blackpool, Thomas McNeal Tomlinson, pharmaceutical chemist, Patricroft, Manchester, to Marianne Garnett, elder daughter of Mr. S. Barlow, Fairfield House, Poulton-le-Fylde.

## Deaths.

**BLACKWELL.**—On August 26, at his residence, Straidlands, Beach Lawn, Waterloo, near Liverpool, Mr. George Grove Blackwell, aged sixty-six. The late Mr. Blackwell was founder and principal of the well-known firm of George G. Blackwell, Sons & Co., Ltd., chemical-merchants, metallurgists, etc., the Albany, Liverpool. He is believed to have been the first to have suggested to English iron and steel manufacturers the utility of manganese, which led to many important changes in quality and economy in those industries. During the Franco-German war—which closed all the chemical-works of both France and Germany and threw much trade into England—bleaching powder, which was then made solely from manganese ore, went up in price by leaps and bounds. Mr. Blackwell promptly took advantage of the situation, and with several others bought up all the manganese ore then known, and for almost two years ran a profitable corner. Mr. Blackwell was also successful in introducing cheap fluor spar for use in furnace fluxes, and also brought to the notice of Sheffield armour-plate makers the uses of ferro-chromium as firstly applied by Krupp. Mr. Blackwell's firm have also controlling interest in the Bauxite Co., Ltd., and are extensive importers of ores. The deceased leaves a widow, five sons, and three daughters. Four of the sons are engaged in the firm, one of whom, Mr. Harold A. Blackwell, has materially assisted in the later developments of the business.

**EVANS.**—At Colwyn Bay, on August 20, Mr. Arthur Morgan Evans, chemist and druggist, eldest son of the Rev. Owen Evans, Colwyn Bay, aged thirty-one. Mr. Evans, who succumbed to tuberculosis, went to France after gaining experience with Messrs. Squire & Sons, Oxford Street, W.

**FODEN.**—On August 23, Elizabeth, wife of Mr. Joel Foden, chemist and druggist, who for many years carried on business in Altrincham, but recently retired.

**HARKER.**—At Matlock, on August 19, Mr. Robert Alfred Harker, chemist and druggist, aged seventy.

**MASON.**—At Seaton. Mr. Jonathan Mason, chemist and druggist, Fernleigh, Seaton, aged fifty-eight. Deceased was in business in partnership with his younger brother, Mr. J. R. Mason, chemist and druggist, 4 Pow Street, Workington, until his retirement about twelve years ago, the business being established by their late father in 1830. A large company testified by their presence at the inter-

ment on August 29 the esteem in which the deceased was held.

**SANGSTER.**—In Chalmers Hospital, Edinburgh, on August 27, Mrs. William Fenwick Sangster, wife of Mr. William Sangster, chemist, late of Dufftown and New Machar.

**WYLES.**—At King's Norton, on August 17, Mr. Benjamin Wyles, chemist and druggist, Selly Park, Birmingham, aged seventy.

## Personalities.

**MR. ALFRED E. SPRAGUE** has resigned his appointment as manager of the London Essence Co., George Street, Chamberwell, London, S.E.

**MR. H. WINTER**, having completed the disposal of Messrs. Lynch & Co.'s business to Messrs. May, Roberts & Co., is taking a trip to Australia, and sails by the *Oroya* on September 4.

**THE MAYOR OF MARGATE**, Councillor D. T. Evans, is a Welsh chemist and druggist who has been at Margate during the last nineteen years, and he had this week the honour of entertaining the Lord Mayor of Cardiff and his daughter.

**THE CHARITY COMMISSIONERS** have issued an order appointing new trustees for Mrs. Ogilvie's Charities. Among the trustees are Mr. Kenneth C. Allen, Cowper Street, City Road, London, N., and Mr. George Stafford Allen, Long Melford, Suffolk, manufacturing chemists.

**MAJOR PERCY J. PROBYN**, D.S.O., R.A.M.C., cousin of Lieut.-Col. Probyn, of Messrs. Hooper & Co., has been appointed sanitary specialist in South China. Major Probyn went through the South African war and is an M.R.C.S. and L.R.C.P., receiving his education at the University Colleges of Cardiff and Aberystwith and the Charing Cross medical school.

## Recent Wills.

**MR. WILLIAM PROCTER COTTAM**, Lancaster, pharmaceutical chemist, who died on June 18, left estate valued at 844/. 16s. 1d. gross, with net personalty 704/. 13s. 7d.

**MR. WILLIAM AGAR**, of 62 Beacon Hill Road, Newark-on-Trent, retired chemist, formerly in business at Mansfield, who died on June 19, left estate valued at 141/. 15s. gross.

**MR. JOSEPH FRANCIS LESTER**, 16 Fonthill Road, Tollington Park, London, N., chemist, who died on June 30, aged eighty-five years, left estate valued at 2,131/. 10s. 8d. gross, with net personalty 2,081/. 10s. 8d.

**MR. ARTHUR LISTER**, F.R.S., F.L.S., of Leytonstone, Essex, botanist and ornithologist, author of several works on fungi, who died on July 19, younger brother of Lord Lister, left estate of the gross value of 147,130/. 11s. 5d., of which the net personalty has been sworn at 125,634/. 4s. 8d.

**MR. PETER JAMES RUMNEY**, of 9 Adamson Road, Swiss Cottage, Hampstead, London, N.W., formerly of Glenalmond, East Molesey, Surrey, proprietor of "Dr. Ridge's Food," and also of the "Wonder" coach, who died on August 5, left estate valued for probate at 10,005/. 16s. 8d. gross, of which 4,472/. 15s. 11d. is net personalty.

**ITALIAN TARTARIC ACID.**—The exports of tartaric acid from Barletta, South Italy, during 1907 amounted to 396 tons, against 65 tons in the previous year. Mr. Vice-Consul Reichliar at Barletta states that it was directed principally to South America. The tartar and tartaric acid exports combined amounted to 739 tons valued at 51,800/.

**SUPPLEMENTARY** to the information given in our issue of March 14 (p. 416) regarding Italian State quinine, Mr. Consul-General Neville-Rolfe in his annual report on South Italy for 1907 states that there has been a large increase in the number of licences for the sale of Government quinine and a considerable decrease in the licences granted to chemists and druggists for the sale of quinine derived from other sources. Encouragement of the export of Government quinine has been granted by a decree which gives a special tariff for all exporters who are willing to purchase it from the Italian Government for the purpose of sending it to other countries. For the financial year 1906-7 the Government made a net profit of 18,512/., or 6,780/. more than in the preceding year, on the sale of quinine.



## Trade Notes.

MR. BERNARD SLACK, Princes Chambers, Wolverhampton, is sending out a new booklet referring to the "B.S. System of Business Increasing." It is interestingly written and well worth reading.

MESSRS. SAMUEL JONES & Co., manufacturers of non-curling gummed paper, have removed to 7 Bridewell Place, London, E.C. Their telegraphic address is "Non-curling, London," and their new telephone number is "Holborn 2970" (two lines).

MESSRS. H. BRONNLEY & Co., LTD., Warple Way, Acton Vale, London, have disposed of the contents of their stand at the Franco-British Exhibition, consisting of Courvoisier's otto of violets perfume and soap and Courvoisier's Havaneta perfume and soap to Harrod's, Ltd., Brompton Road, Kensington, W.

HARLENE HAIR-DRILL.—Writing in regard to our note of August 29, Edwards' Harlene Co. say:

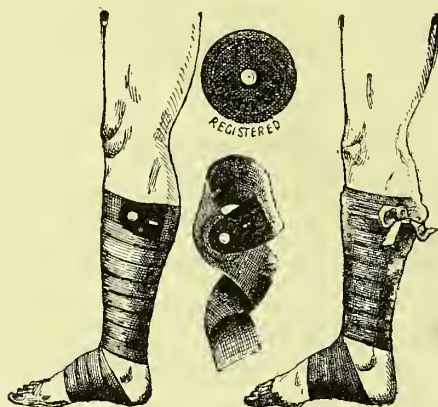
We are advertising to the public a combination parcel, comprising our three preparations as the consistent hair-drill, not as essential preparations—8s. worth, which must not be refailed below 6s. The desired effect is assured when a preparation of an oily nature is required by using Uzon (brilliantine) in conjunction with Harlene, and advantages are greater where "Cremex" shampoo-powders are used. We have placed this combination parcel on the market more for the benefit of the chemist, as with a little effort on the part of his salesman he should sell the three preparations instead of one, and is thus assured of a fair profit and a greater turnover.

SOAP "BISCUIT," a preparation for cleaning and purifying artificial teeth and dentures, made by Messrs. Edward Cook & Co., Ltd., Bow, E., adds to that firm's reputation as soap-specialists, inasmuch as it is a novel, much-needed, and effective preparation. It is in the form of a cake shaped like a small biscuit, and is sent out with an open china dish suitable for the toilet table, the whole being enclosed in a carton. The "biscuit" is slightly saponaceous, but does its work thoroughly, removing from vulcanite, metal, and porcelain that film of organic matter which is so difficult sometimes to attack, leaving the denture antiseptic as well as aseptic. It is a novelty for which chemists should establish a good sale among their customers.

MESSRS. FORD, SHAPLAND & Co., chemists' printers, 6 Great Turnstile, High Holborn, London, W.C., submit samples of 1909 almanacks and calendars for chemists. Attention is specially called to the octavo size (7½ in. by 5 in.) almanack. The thirty-six pages (including covers) contain much that is interesting and useful, such as post-office information, ready reckoner, hints for the sick-room, foreign measures of distances, in addition to the usual calendar information of dates, moon changes, sun rises and sets, etc. The whole is well lightened by humorous anecdotes and profuse illustrations, ample space being left for the distributor's own advertisements. The chemists' pocket almanack (3½ in. by 2½ in.), of thirty-two pages, contains, in addition to advertising space, ruled memoranda pages, postal information, emergency guide, hints for the sick-room, and also a useful list of medicinal, toilet, nursery, and household requisites. A neat card calendar and calendar book-mark is also issued.

MESSRS. EVANS SONS LESCHER & WEBB, LTD., of Liverpool and London, have issued the seventh edition of Hawley's "Counter Adjuncts," a volume of striking appearance, bound in red linen with yellow lettering, of 330 pages (9½ × 7½), printed in the publishing department at Liverpool. The first edition was published in 1884, the idea of chemists' own counter goods having originated by this firm in 1882. Over 500 different articles are described in the first 252 pages, which are illustrated by over 350 engravings. The particulars and prices given afford some conception of the wide range in each class of packed goods. Sixty-six pages are devoted to "Recent Materia Medica," giving the origin, constitution, or use of about 2,500 therapeutical agents used in medicine, this forming a convenient reference for the busy pharmacist. A fine example of the artistic colouring of the labels and cartons used is given in the coloured design for an effervescent saline carton facing p. 151.

**RUBBER BANDAGE CATCH.**—Chemists are well aware of the drawback to pure rubber bandages, in regard to the difficulty of fixing them when placed on the leg. The convenient and popular safety-pin cannot be used, and tapes



are often objected to. Messrs. F. Schutze & Co., Caledonian Market, London, N., have devised a new catch consisting of a stud, the back of which is of considerable circumference and flexible. With this catch the bandage is secured as shown in the figure.

**ORGANIC ARSENICAL COMPOUNDS.**—We have recently (*C. & D.* August 22, p. 323) referred to Colonel Lambkin's communication to the British Medical Association on the treatment of syphilis by intra-muscular injections of sodium para-aminophenylarsonate, one of a series of organic arsenical compounds which have been prepared as the result of research in Messrs. Burroughs Wellcome & Co.'s laboratories. The firm have now placed three definite compounds on the market, including the above-named salt, under trade-marked names, as follows:

**"SOAMIN."**—Sodium para-aminophenylarsonate. Soluble in about five parts of water, giving a neutral solution, which can be sterilised. It contains 22.8 per cent. of metallic arsenic. It is incompatible with acids and with solutions of the heavy metals and of quinine. It has less than one-fortieth of the toxicity of arsenious acid.

**"KHARSIN."**—Sodium 3-methyl-4-aminophenylarsonate contains 23.7 per cent. of metallic arsenic. It is soluble in two-and-a-half times its weight of water, giving a neutral solution. It is about equal in toxicity to "Soamin."

**"ORSUDAN."**—Sodium 3-methyl-4-acetylaminophenylarsonate is anhydrous and contains 25.4 per cent. of arsenic, being soluble in three times its weight of water, giving a neutral solution. It is the least toxic of the three salts, being one-fifth or one-sixth less toxic than "Soamin."

These are employed in the treatment of trypanosomiasis (sleeping sickness), syphilis, malaria, and other protozoal diseases, pernicious anaemia, and skin-affections. Messrs. Burroughs Wellcome & Co. put them on the market in crystalline powder, contained in 5 and 30 gram bottles, and in tabloids each containing 1 grain.

**FORMANGANATE DISINFECTOR.**—Messrs. Parke, Davis & Co., Beak Street, London, W., have devised an efficient process of using formaldehyde as a disinfectant, which is as satisfactory as it is simple. The method is based upon the fact that when formaldehyde solution is poured upon potassium permanganate a vigorous reaction occurs with sufficient heat to promote the evolution of water-vapour as well as formic aldehyde. Water-vapour is necessary to produce an efficient disinfectant when formaldehyde is being employed. The difficulty in using permanganate, which has hitherto militated against this method, has been the violence of the reaction, and it is this point that Messrs. Parke, Davis & Co. have specially mastered in the formanganate disinfectant. The potassium permanganate has been made into briquettes by means of a cement so that the reaction is perfectly under control and quite safe in use. The formanganate disinfectant comprises a bottle of formaldehyde solution and a tin box of permanganate briquettes in a stout carton, the whole forming one of the simplest methods of disinfection on the market, as no other special apparatus is required.



## THE NEW FRENCH CODEX.

### A First Glance at some of the Novel Features of the 1908 Edition of the Pharmacopœia of the French Republic.

THE task of bringing the French Codex up to present-day standards has been no light one. The last edition was issued as long ago as 1884, and a supplement in 1895. Since 1884 many important changes have taken place in the methods of preparing and administering medicines, which are naturally reflected in the new edition. The impression that we get from our hasty survey is that there is a conservative tendency in the selection of new drugs and in the processes for preparing and standardising galenicals. It must, however, be understood that the Codex is distinctly national in character, and it faithfully reflects the trend of pharmacy in France. We referred recently to the wholesale sacrifice that has been made of galenicals and other medicaments which, considering the advances that have been made in the last twenty-five years, is not a matter of surprise. Many of the newer remedies have been introduced in the new edition, chiefly under their chemical names, but where the substance is commercially obtainable under a registered name, such name is given with an asterisk, denoting that the mark is registered. The limits of impurities and standards for chemicals have been dealt with only lightly. The monographs for chemicals are arranged in the following general manner: Method of preparation (when given), description of the substance, tests of identity, tests for impurities, and, where possible, methods of determination. Quinine sulphate is an instance of the completeness with which many of the monographs in the new work are written. The salt adopted as the official one is the sulphate containing eight molecules of water of crystallisation, equivalent to 16.18 per cent.; its efflorescent nature is emphasised, and the exact amount of water which it loses at various temperatures is recorded in detail. The ammonia-test is adopted for the detection of the presence of other cinchona alkaloids, the following being an abstract of the test:

Take 1 gram of the basic sulphate of quinine, dissolve it at a boiling temperature in 30 grams of distilled water, allow it to cool to a temperature of 15° C., maintaining it at this temperature for half an hour, the vessel being immersed in a water-bath maintained at a temperature of 15° C. and frequently shaken; the solution is filtered at 15° C., and the following tests are performed on the liquid:

(a) Transfer by means of a graduated pipette 5 c.c. of the limpid liquid into an assayed tube, and add 5 c.c. exactly of a 10-per-cent. w/w solution of ammonia, taking care to disturb the flask as little as possible during the mixing of the liquids. Stopper the tube and invert it gently several times. The quinine at first precipitated should redissolve, and a limpid mixture should be obtained which should remain in this condition after twenty-four hours. A permanent turbidity or slow deposition of crystals in this liquid, which was at first clear, indicates the presence of alkaloids other than quinine.

(b) Remove 5 c.c. of the original limpid liquid, place it in a small accurately tared porcelain evaporating-basin, and

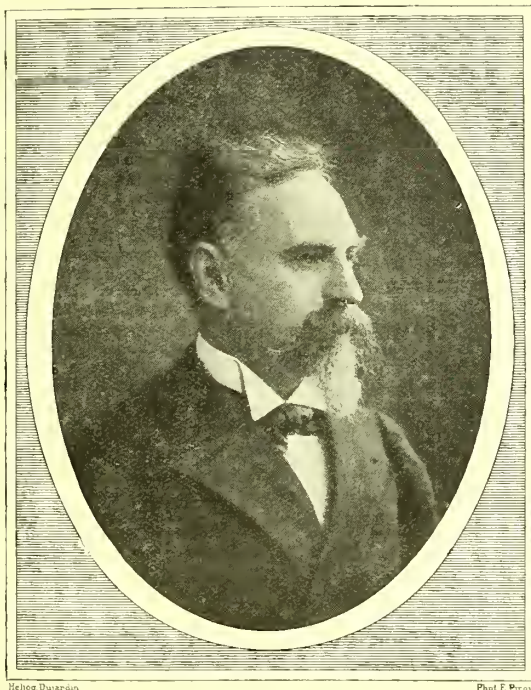
evaporate on a water-bath at a temperature of 100° C. until the evaporating basin no longer shows a variation in weight. The residue left by the 5 c.c. of liquid should not weigh more than 0.008 of a gram; the presence of other soluble salts increases the weight of this residue.

We have noted the above somewhat in detail to give an idea of the vast amount of information given in the monographs.

The standardisation of the drugs and galenical preparations is somewhat disappointing, much recent work not finding a place in its pages. Thus *nux vomica* is still standardised to the percentage of total alkaloids, and no method is given for separating the strychnine and brucine. In the case of cinchona, on the other hand, this is carried to the other extreme, and, in addition to the amount of total alkaloids, a definite quinine-standard has been adopted. It appears to be the first instance in which a quinine standard has been adopted by an important pharmacopœia. The bark is required to contain not less than 5 per cent. of total alkaloids, of which not less than 1.5 per cent. is required to consist of basic quinine sulphate containing eight molecules of water of crystallisation.

In almost all instances the determination of the amount of alkaloid present in a drug is carried out on the powdered and dried drug, and the determination of the amount of moisture present made on a separate portion. In some instances gravimetric results are made, in others only a volumetric determination. Nearly all the recommendations of the Brussels Convention have been accepted, the following being some of the standards that have been adopted.

While no standard is given for aconite-root, the extract is required to contain 1 per cent. of alkaloids; the tincture is standardised to contain 0.05 per cent. of total alkaloids and is prepared with alcohol (70 per cent.), this being in accordance with the Conference recommendations. Neither belladonna leaves nor root are standardised. Cantharides is required to contain 0.4 per cent., which appears to be a low figure. Cinchona, as already stated, must contain at least 5 per cent. of total alkaloids, and at least 1.5 per cent. shall consist of basic quinine sulphate, containing eight molecules of water of crystallisation, equivalent to 1.257 per cent. of anhydrous basic quinine sulphate, or at least 1.092 per cent. of anhydrous quinine. The aqueous extract is required to contain not less than 6 per cent. of total alkaloids; no fluid extract is included. The tincture is not standardised. Coca, colchicum, or conium are not standardised, and only colchicum-seeds are official in accordance with the recommendation of the Brussels Conference. Cortex granati is standardised to contain not less than 0.25 per cent. of alkaloids, the determination being a volumetric one, and the result is expressed in terms of the mixed alkaloids. Guarana is



The above is an excellent likeness of Professor Em. Bourquelot, Secretary to the French Codex Revision Commission. It is from a Parisian photograph by E. Piron, héliographed by Dujardin.

*Em. Bourquelot*



not standardised. Hydrastis is not standardised, but the extract is required to contain at least 10 per cent. of hydrastine, the fluid extract at least 2 per cent. hydrastine. Hyoscyamus is not standardised. Ipecacuanha is required to contain at least 2 per cent. of alkaloids. Jalap is to contain 7 per cent. of jalap resin, this being one of the lowest standards. Great attention has been devoted to the standardisation of kola, although coca is not standardised. Kola is required to contain at least 1.25 per cent. of caffeine, the extract not less than 10 per cent., the fluid extract not less than 1.25 per cent. The recommendations of the Brussels Convention have been practically adopted for the standards for nux-vomica seeds, nux-vomica extract, and the tincture. The seeds are required to contain not less than 2 per cent. nor more than 3 per cent. of alkaloids; the extract is to contain exactly 16 per cent. of total alkaloids, but the fluid extract is not official. Opium, when dried at 60° C., is required to yield not less than 10 per cent. of morphine. The same is applied to the extract (which is required to contain 20 per cent. of morphine), the tincture (which must contain 1 per cent. of morphine), the tinctura opii crocata (which is to contain 1 per cent. of morphine), and the tinctura opii benzoica (which is required to contain 0.05 per cent. of morphine). Physostigmine, pilocarpus, scopolia, and scammonium are not standardised.

In dealing with a drug, a list of the preparations made from it is given at the end of the monograph, which is exceedingly useful, and enables a ready reference being made to the whole of the preparations. A notable feature is the comparatively few fluid extracts included, which forms a strong contrast to the United States Pharmacopoeia. In cases of tinctures and such-like preparations where no quantitative determination is made of the amount of alkaloid present, well-marked reactions are required to be given by the usual alkaloidal precipitants.

Several references have been made in the *C. & D.* within the last few months to the work that has been done in France on mercurial oil (see *C. & D.*, December 7, 1907, p. 853, and January 18, p. 94). The formula adopted in the new Codex contains 40 per cent. of metallic mercury, and is that given in the *C. & D.* of January 18. Minute directions are included as to the process of sterilising the lanoline and vaseline oil. The anhydrous lanoline is sterilised by heat after previously melting and filtering. It is to be performed in a conical vessel of Bohemian glass. This is kept at a temperature of 120° C. for twenty minutes. The flask should then be hermetically sealed and kept in an autoclave at 120° C. for a similar period. The vaseline oil is prepared in the same manner. A pestle and mortar are sterilised by rinsing in alcohol and igniting. The anhydrous lanoline is transferred to the mortar, and the mercury rubbed up in it until completely extinguished. The vaseline oil is added in small quantities at a time and is intimately mixed. The operation is throughout to be conducted under rigorous aseptic conditions, and the mixture preserved in a well-stoppered flask, or preferably in small vessels of 2.5 or 10 c.c. capacity, and which have been previously sterilised at 180° C. Grey oil so obtained is of a fluid consistency at a temperature of 15° C. to 20° C., and of a very dark-grey colour.

The publishers of the Codex, Messrs. Masson & Co., 120 Boulevard St. Germain, Paris, have a big task before them to get the book out by the time it becomes official, but all possible expedition is being used to this end.

**CHINESE ESSENTIAL OILS.**—The exports of aniseed and cassia oils from Wuchow during 1907 amounted together to 2,529 cwt. (aniseed oil 2,038 cwt., cassia oil 491 cwt.), valued at 68,572*l.*, as compared with 2,557 cwt., valued at 70,363*l.*, in 1906.

**C. & D. DOSE TABLES.**—*B. W.* (271/18) says: "Your little booklet of doses, etc., is right up-to-date and most convenient." The first edition is almost exhausted and another is in the press. Threepence a copy is the price of it, or 2*s.* a dozen, from the *C. & D.* Office, 42 Cannon Street, London.

**PHOTOGRAPHIC REQUISITES IN BRAZIL.**—Photographic appliances command a considerable sale at Bahia. At the present time the various appliances in question sold there—cameras, lenses, plates, printing-papers, etc.—are supplied by the United States, Germany, and by France, in the order named.

## Scientific Progress.

Temperatures under this heading are on the Centigrade scale.

**Identification of Morphine and Oxy-dimorphine.**—C. Hoshida ("Jour. Phar. Soc., Japan," 1908, 317) recommends for the detection of oxy-dimorphine a freshly prepared mixture of 0.15 gram sodium molybdate, 10 drops of formalin (35 per cent.), and 30 c.c. of sulphuric acid. When applied to oxy-dimorphine this reagent produces first a violet colour, which quickly changes into a clear blue-green, which disappears when water is added. In the case of morphine the colour is first violet, which gradually changes into blue violet, and finally into a dirty green colour.

**A New Theory of Molecular Volumes,** by Gervasse le Bas, B.Sc.—An article on this subject was commenced in the "Chemical News" of August 21. The author bases his theory on the following propositions: The molecular volumes of chemical compounds under corresponding conditions (1) are entirely functions of their chemical composition and constitution; (2) are partly additive and partly constitutive, and that the atomic volumes (3) are susceptible to slight changes, but preserve their characteristic relationship to the volumes of dissimilar atoms; (4) are smaller in a closed than in an open chain compound.

**Nipponium.**—M. Ogawa ("Jour. Imp. Univ., Tokyo," 1908 25, Art. 15) has separated from thorianite, reinite, and molybdenite a new element of atomic weight about 50, for which he has proposed the name "Nipponium" (Np.). The author thinks the metal possibly fills the gap between molybdenum and ruthenium in the periodic system. A few centigrams of the oxide of this element is contained in a kilogram of thorianite. Reinite yielded 5 decigrams per kilogram, and molybdenite probably contains a still larger proportion than reinite. The freshly-precipitated hydroxide of nipponium is almost white with a yellow tinge, and less soluble in caustic alkali than aluminium hydroxide. On drying it becomes nearly black, and on ignition gives a dark-brown oxide, insoluble in acids, but yielding a water-soluble product on fusion with potassium bisulphate. The hydroxide dissolved in hydrochloric acid forms a yellow-green solution, which gives with ammonium sulphide a greenish-black precipitate, and a yellow-brown precipitate with potassium chromate in the presence of acetic acid. The spectrum of the solution of the chloride gives a characteristic line (wave length 4,882) in the green-blue and two feeble lines. Apparently two oxides exist; the lower basic oxide is found with alumina during the separation process and can be isolated by igniting in a stream of chlorine and carbon tetrachloride, the new element volatilising in the form of the slightly volatile anhydrous chloride. The higher acidic oxide is like molybdenum trioxide.

## New Books.

These notes do not necessarily exclude subsequent reviews of the works. Any of these books printed in Great Britain can be supplied, at the published price, to readers of this journal on application (with remittance) to the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Brown, W. Carnegie. *Spruce and its Treatment*. 2 plates. 4to. Pp. 270. 6*s.* net. (Bale.)

Drabble, E. *Elementary Botany*. 7½×4¾. Pp. 240. 2*s.* 6*d.* (E. Arnold.)

Durville, J. P. *Nouveau Guide du Parfumeur (Parfums Naturels et Parfums Synthétiques)*. 2nd edit. 7½×5. P. 439. Broché, 5 fr*s.*; relié percaline, 6 fr*s.* (Desforges, Paris.)

Fitton, J. H. *Railway Rates and How to Check Them*. 3*s.* (Birkby.)

*Income-tax Accounts and How to Prepare Them. Notes on Income-tax Law and Practice*. 4¾×7¼. Pp. 78. 2*s.* (Pitman.)

Munro, Andrew, F.C.I.S. *Book-keeping Down to Date*. 7×4½. Pp. 120+xix. 1*s.* net. (London: Effingham Wilson. Glasgow: Holmes.) [This is an elementary edition of the author's "Book-keeping Down to Date." It deals with the ledger and the subsidiary books used in business, the whole being presented in a way which attracts the novice on the subject. The book also contains recent examination papers of the Society of Arts, the West Riding County Council, and other authorities on the subject.]

Newsholme, Arthur. *The Prevention of Tuberculosis*. 9×5½. Pp. 442. 10*s.* 6*d.* net. (Methuen.)

Strasburger, E. *Handbook of Practical Botany*. 6th edit. 8¾×5½. Pp. 560. 10*s.* 6*d.* (Sonnenschein.)



## Observations and Reflections.

By "Xrayser."

### The Medical Legislators

at the back of the attempts which have been made in various colonies to check and ultimately to suppress altogether the sale of proprietary medicines are no doubt honestly persuaded that their communities would be truly blessed if their sick, lame, and distempered members were compelled to accept their diagnostic skill, and no other body's, and pay their usual fees. A clear-out of patent medicines is obviously the most practicable first step towards the thorough house-cleaning which they contemplate. With respectful sympathy with the pharmacists and population generally of the Orange River Colony I can almost find it possible to regret that Dr. Pratt Yule should have failed to get his Parliament to take this first step. It would have been so interesting to have seen what the next would have been. The Bill framed by Sir Victor Horsley and the Political Committee of the British Medical Association prescribing a hundred pounds penalty and imprisonment with or without hard labour for any unqualified person who should practise medicine for gain is an admirable ultimate ideal, but on the Orange River as on the Thames it can only be reached by easy stages.

### A Duchess

is a welcome addition to a chemist's *clientèle*, and probably many would willingly pay her a handsome salary to have her carriage stopping at their doors occasionally. But in the absence of a contract to that effect formally made and provided, the chemist who supplies such a lady with pharmaceutical luxuries has a right to be paid for them, and when he has got judgment for his debt may claim to have that judgment in due course. At least that would be the law in England, and anyone who has seen judgment debtors dealt with in our County Courts at the rate of about forty per hour will perceive how inconvenient it would be if each were treated with the consideration which the Irish Master of the Rolls thinks her Grace of Manchester is entitled to.

### British Medicinal Plants

are a proper subject of pharmaceutical study, and hundreds of them have interesting histories. But of all these not more than a dozen perhaps could be traced in any form in our modern shops. Take the three figured last week. Tansy was such a powerful remedy that its mere smell was recommended in some serious cases. Wormwood was a Pharmacopœia in itself. As an indication of its virtues "Ray informs us that green wormwood worn in the shoes corrects a cold intemperature of the stomach. Hence we see why wormwood is called stomachic, anti-febrile, anti-hysteric, anthelmintic, narcotic, and good against the colic." The lixivial salt of wormwood which was in all Pharmacopœias through most of the eighteenth century still lingers among our daily orders as a cure for whooping-cough. Unguentum althææ too, is about all that remains of marshmallow, and that exists only on the labels. It was reported quite recently that a party of West Ham chemists took a half-holiday in Hainault Forest, where some of them amused themselves by collecting medicinal herbs, which, said the sympathetic chronicler, reminded them of their students' days. What else could these worthy vegetables remind them of? Certainly not of their daily work.

### Toxicological Science

as represented by the late Sir Thomas Stevenson, and no doubt by his successor as analytical expert at the Home Office, has done wonders in its long

contest with the particularly cowardly form of crime which so long baffled the skill of chemists, but which during the past century has been so far conquered as to be deprived of the mystery which once surrounded the exploits of the secret poisoners, and consequently the greater part of the terror which they once inspired. The annals of poisonings in the Rome of the Emperors and in the Rome of the Popes, in the Paris of Louis XIV., and in many other epochs when these crimes seemed to prevail with special fury, may have been to a great extent fabulous. Certainly the evidence accepted in courts of justice, evidence similar to that on which multitudes of witches were burned, could not be relied upon; especially when it was given in times of panic. A contemporary account of the state of alarm in which grand society lived about 1770-80 is narrated in the last number of the "Revue de Paris." So general was the fear that "If anyone became unwell after a meal poisoning was at once suspected, and cooks and valets were despatched to prison." Naturally when the Government established a special court, called the *Chambre Ardente*, to try these poisoning cases, the terror was accentuated. And certainly the experts of that day did not help to allay it. The poisons used by the Marchioness de Brinvilliers and her accomplice, Ste.-Croix, were placed in the hands of an apothecary named Guy Simon, and his report is that of a man confronted with a miracle. After detailing his experiments on a dog, a cat, a fowl, and a pigeon, which revealed nothing except the deadly character of the substance, he says "poisons in general sink in water, and tested by fire the innocent part is dissipated and only the acrid and piquant principle is left. But this poison of Ste.-Croix's floated on water, left nothing but what was sweet and innocent when burned, and killed animals without furnishing a trace in any organ whereby it might be detected. "It is a terrible, diabolic, intangible poison," concludes the helpless apothecary.

### Nearing the Goal

was one of the big cap headings by which the "Daily Chronicle" tempted its readers to meditate on Sir William Ramsay's modest intimation to a Paris journalist that he was now working on the conversion of silver into gold. Of course the "Matin" man took this to mean that the long quest was as good as over, especially as his informant had just come from Clermont-Ferrand with the French Scientific Association's Gold Medal in his pocket, and had already explained his analogous success in reducing copper atoms to lithium ones by the aid of the radium emanations. No doubt the same journal had published not many days previously Madame Curie's report on her experiments which did not confirm Sir William Ramsay's copper conclusions; but the Scotch professor's announcement was by far the more tempting as a news item, so it was convenient to forget for the moment the opinion of the discoverer of radium. But even if Sir William should accomplish the task he has now set himself, the goal, if it were so regarded, would be but a poor finish and crown of the centuries of toil by myriads of patient workers. A great triumph of scientific prescience, no doubt, and perhaps a little more useful than the diamond discovery of Lemoine's, if it had been realised, would have been; but still of far less intrinsic value than the location of a new seam of coal. Sir William has evidently no mercenary designs on the Rothschilds, for he told his interviewer with a smile that his process would not be a lucrative way of making gold; and even if shillings could be converted into sovereigns by the mere touch of a wand, there would be no profit in the business. The sovereigns would be only worth a shilling each, *plus* the cost of applying the wand. Authorities on currency have deduced a law from the study of historical attempts to debase coinage to the effect that if this is done on an appreciable scale the good coins fall to the value of the inferior ones; and this would necessarily be the case if alchemical gold could be manufactured in unlimited quantity.

# DISINFECTANTS.

CHEMISTS are respectfully invited to apply for samples and quotations of all requirements in the nature of Disinfectants to the largest Manufacturers in the World,

**THE "SANITAS" COMPANY, LTD.**

Locksley Street,  
LIMEHOUSE, LONDON, E.

**WILCOX, JOZEAU & CO.,**

49 Haymarket, LONDON, S.W.

WHOLESALE IMPORTERS  
OF PHARMACEUTICAL SPECIALITIES.

**FRENCH & GERMAN  
PROPRIETARY MEDICINES**

PRICE LIST ON APPLICATION. LOWEST PRICES.

**WARRICK**

**BROTHERS.**

## "THE CHEMIST & DRUGGIST" SERIES.

PHARMACEUTICAL FORMULAS.  
THE ART OF DISPENSING.  
VETERINARY COUNTER PRACTICE.  
THE CHEMIST-OPTICIAN.  
ELEMENTARY DISPENSING PRACTICE:  
PHARMACEUTICAL TESTING.  
DISEASES AND REMEDIES.  
GUIDE TO PRELIM. EXAMS.  
URINE ANALYSIS.  
CHEMISTS' MEDICAL DICTIONARY.  
OPENING A PHARMACY.

Price 10/-, by Post 10/6  
Price 6/-, by Post 6/4  
Price 4/-, by Post 4/4  
Price 4/-, by Post 4/3  
Price 3/6, by Post 3/9  
Price 2/6, by Post 2/9  
Price 3/-, by Post 3/3  
Price 2/6, by Post 2/9  
Price 2/6, by Post 2/9  
Price 2/6, by Post 2/8  
Price 2/-, by Post 2/2

Published at the Offices of "THE CHEMIST AND DRUGGIST,"  
LONDON, MELBOURNE, AND SYDNEY.

# GRIMBLE'S PURE VINEGAR.

Brewery : LONDON, N.W.

JAMES  
BURROUGH  
LTD.  
Cale Distillery,  
Hutton Road,  
LAMBETH,  
S.E.

**SVR**

AND  
METHYLATED  
SPIRIT  
at lowest prices.

Write for Quotations.

## FLETCHERS' HYDROBROMATES.

The titles "Syr. Hydrobrom." and "Syr. Hydrobrom. c. Strychnia" were originated by us in the year 1879 and can only be legitimately applied to FLETCHERS' HYDROBROMATES. Legal proceedings will be instituted against any firm or person dispensing or offering for sale fraudulent imitations of FLETCHERS' SYRUPS.

SOLE PROPRIETORS.

FLETCHER, FLETCHER & CO., LD., LONDON, N.

## Editorial Comments.

### Mnemic Matter.

THIS year's meeting of the British Association for the Advancement of Science synchronises with the jubilee of the doctrine of the origin of species by natural selection, which the Linnean Society celebrated two months ago, and it is remarkable for the fact that a second of the sons of Charles Robert Darwin occupies the presidential chair of the Association, and further, that he confessed that he was "forced to appear as a champion of what some . . . consider a lost cause—the doctrine of the inheritance of acquired characters." Perhaps to ordinary people no more astounding sentences than this of Mr. Francis Darwin's, uttered at such a time and on such an occasion, could be conceived; but before Mr. Darwin finished his address—tough reading in the bulk, but brightly luminous in its summations of the results of research in regions unknown to "the general"—he had carried Darwinism a step further, and fairly established that characters are acquired and transmitted from generation to generation of living organisms. The address was particularly notable, on account of its exposition of the existence of mnemic power or memory in plants, to which we shall briefly refer. At the outset it is interesting to note that Mr. Francis Darwin is the third son of the great naturalist and a grandson of Josiah Wedgwood. He was educated at Trinity College,



FRANCIS DARWIN, M.B.,  
LL.D., F.R.S.



Cambridge, from which he graduated, then studied medicine there and at St. George's Hospital, graduating as M.B. at Cambridge in 1875. He did not practise medicine, but assisted his father in his researches at Down until his death, when he returned to Cambridge, where he has continued botanical research, and has published numerous papers on physiological botany, as well as several books on botany. He is Foreign Secretary to the Royal Society, and has an intimate knowledge of foreign literature and work on his own subject, which was reflected in his address. The fact that he participated in his father's work and has continued it is in itself an instance of an acquired character. At the commencement of his address Mr. Darwin insisted that if the study of movement in plants includes the problem of stimulus and reaction, morphological change must be investigated from the same point of view, and his discourse was accordingly devoted to an exposition of the results by leading workers in the study of such movement, to morphological changes, habit in organisms illustrated by movement and morphology, Weismann's theory of inheritance, and the mnemonic theory. The main proposition is that living organisms contain within themselves some arrangement whereby the impression of an external influence is recorded, so that on a recurrence of the influence the organism detects it by mnemonic or memory-like power. We owe the expression *die Mneme* to Professor Richard Semon. We all know what memory is in its effects, and that man is the richest storehouse of it; but except that it is associated with highly specialised nerve and brain tissue, we do not know how it is created and established in the organism *homo*. Yet we deny that it is common to living organisms, or at least we suppose that it can only exist where there are nerves and brain. As has been stated, Mr. Darwin submits that this attribute is common in varying degrees to all that has life, and the beginnings of it he beautifully illustrated with the infusarian *Stentor*. When this is stimulated by a jet of water containing carmine in suspension, a physiological state (A) is produced, which, however, does not immediately lead to a visible reaction. As the carmine stimulus is continued or repeated, state B is produced, to which the stentor reacts by bending to one side. After several repetitions of the stimulus state C is produced, to which the animal responds by reversing its ciliary movement, and C finally passes into D, which results in the stentor contracting into its tube. Now if the experiment is continued at intervals, by-and-bye the stentor contracts at once as soon as it comes into contact with it. Here the impressions of the external influence have created a record or *engram*, through which the organism skips B and C to the condition of safety, D. Instances of allied actions in plants exist, and since the protean matter of all living organisms is the same, it is reasonable to infer that in the stentor we have an excellent instance of the beginning of memory and of that deeply mysterious phenomenon in which germ-cells carry from generation to generation the characters of parents. A considerable part of Mr. Darwin's address was devoted to the latter matter, which is conceivably in the same category as the mnemonic power that builds up acquired character, and it is such characters as are useful to perpetuation of the species which are transmitted. Here is an illustration in Mr. Darwin's own words:

The impulse conveyed to the nucleus of the germ-cell is the external stimulus. Thus, if a somatic cell (A) is induced by an external stimulus (s) acting on the nucleus to assume a new manner of development, a disturbance spreads through the organism, so that finally the nuclei of the germ-cells are altered in a similar manner. When the cellular descendants of the germ-cells reach the same stage of ontogeny as that in which the original stimulation occurred, a stimulus comes into action equivalent to s as regards the

results it is capable of producing. So that the change originally wrought in cell A by the actual stimulus s is now reproduced by what may be called an inherited stimulus. But when A was originally affected other cells, B, C, D, may have reacted to s by various forms of growth. And therefore when during the development of the altered germ-cell something equivalent to s comes into play, there will be induced, not merely the original change in the development of A, but also the changes which were originally induced in the growth of B, C, D.

It will be obvious that this is not what we call memory—the mnemonic record of personal experiences which dies with the individual who in life is able to recall that which made the record. But we gather that the mnemonic theory postulates that in the same manner habit is produced, and no habit is established without initial mental effort—i.e., recalling the previous experience the repetition of which establishes in us the power to do the thing unconsciously or automatically. The mnemonic power of plants is more akin to this than to memory. Is this novel? Is it not the process or a mere plotting out of the letters which go to form the words “inheritance of acquired characters,” in which Darwin and Wallace fifty years ago expressed a doctrine which has been of the greatest use in the study of living things? There is, it seems to us, in the higher ranks of science a tendency to depart from the simplicity of the old masters in science, whose great generalisations are like a fine mansion in which we neither see brick nor stone. The general result is what we see; but in these later days men come forward and tell us how many are the bricks and stones, their dimensions, properties, etc., and they sometimes break up the structure in the process. That seems to be the habit of some who regard the doctrine of the inheritance of acquired characters as a lost cause. Happily their vandalism has not gone further than window-breaking.

### Italian Citric Materials.

In our issue of August 15, p. 295, we printed particulars regarding the new Sicilian law providing for the imposition of an export duty on citrate of lime and concentrated lemon-juice, which was to come into operation this month. We then pointed out that an “export tax” of 120 lire or 5*l.* per pipe, as had been suggested, is not expressly mentioned in the Act, but that on goods not entrusted to the Camera Agrumaria for sale there is to be a tax not exceeding 60 centimes per 100 kilos., and “for each per cent. (or degree) of citric acid, free and combined, added together.” This clause in quotation marks, it now appears, from information sent us by a Messina correspondent, has purposely been made obscure by the promoters of the Act. Citrate of lime is sold on a content-basis of 64 per cent. of citric acid and usually is fairly close to this, so that the duty may be roughly calculated at 38.40*f.* per 100 kilos., or at 117.20 lire per 305 kilos. In other words, the material to make 1 lb. of citric acid would pay, if the maximum tax is demanded, 2*3*/<sub>4</sub>*d.* per lb. This tax has given rise to much indignation among the merchants of Sicily who deal in these products. They look upon it as a barefaced attempt to do away with the middleman commission agent, and thus increase the margin of profit on by-products to the planter and manufacturer. On the present basis the tax amounts to a prohibition of the merchant's business, and this is what the promoters originally wanted, their idea being that everything should pass through the “Camera.” If a merchant now sells 20 tons of citrate of lime, and the maximum tax is claimed from him, he will have to pay 305*l.* sterling on the transaction alone. It will, therefore, be seen that the position is a peculiar and difficult one for the maker of citric



acid. Several reports have been current as to when the new law will be put in force, but it will probably be another month before operations commence. At the moment business is at a standstill in these by-products; everybody is puzzled as to what will happen next, and as to whether the law can be successfully worked. Nobody is pleased—least of all the promoters, because their proposal for a Consorzio Obbligatorio in lemon products (including lemon oil) was rejected. When the measure was passed it was said to be a hasty and ill-advised piece of legislation, but now that everybody is discontented there is a growing feeling in Sicily in favour of asking the King to exercise his prerogative and suspend the whole Act. It is true there are other “tasse-Camerale” in Italy, but they are not of such a nature as the one under discussion. Thus, a tax of 50 centimes per 100 kilos. is paid to the Chamber of Commerce on all essential oils, but this amount is nominal. Tartaric materials, such as wine-lees, pay an export tax to the Government, and also a “tasse-Camerale” to the Chamber of Commerce. In some quarters the present law is stated to have been passed forward by the Italian Government more for high reasons of State than anything else. Sicily in the Kingdom of Italy is a discontented partner, like Ireland, and when ex-Minister Nasi, a Sicilian, was released from prison he threatened to become a second Parnell. For some time past the Italian Government has determined to have a contented Sicily at any financial cost. Hence there is the brimstone monopoly, and now the Government have formed the “Camera Agrumaria” they have taken away the battle-cry of the Nasi party. Little enthusiasm is shown for the new law in Sicily, and if left to themselves the banking interests, it is said, will refuse to make the required advances, except on usual banking terms, and under no conceivable circumstances will they risk any losses on produce. Perhaps it would be as well if speculators in citrus products for a decline should leave these articles alone for the present, as still more vigorous measures might yet be taken by the Italian Government to bring about some amelioration in the Sicilian lemon-products industry. Business in citric acid for forward delivery at the moment is out of the question, and should the full tax equivalent to 2½*d.* per lb. be demanded it is almost certain that citric acid will have to be advanced to this extent. This development should give the required stimulus to West Indian planters, who are yearly paying increased attention to the manufacture of citrate. At the present time tartaric acid is about 6*d.* per lb. cheaper than citric, and this in a measure accounts for the much larger demand where it can be profitably substituted.

## Inland Revenue.

THE report of the Commissioners of Inland Revenue of Great Britain and Ireland has been issued this week, showing receipts in the year April 1907 to March 1908 as follows:

	Gross	Net
	£	£
Excise duties ... ..	37,032,784	35,724,585
Estate, &c., duties ... ..	19,363,161	19,108,256
Stamp duties ... ..	7,974,428	7,930,585
Land tax... ..	756,881	710,002
Inhabited house duty ... ..	1,942,118	1,939,865
Income tax ... ..	34,658,669	31,860,380
	101,728,041	97,273,673

The Department handled altogether 111,051,191*l.* in the financial year, and on the disposal side of the account the sum of 4,527,109*l.* appears as “Drawbacks, discounts, repayments, etc.” The Exchequer received 97,830,000*l.*, which is the largest sum derived from Inland Revenue during the past decade, the next largest having been 95,500,000*l.* in 1902-3. The net receipts for 1907-8 have been exceeded three times in the decade, the top year being 1902-3, when 104,851,309*l.* was the total.

### Excise Duties.

Beer duty yielded 13,116,965*l.*; spirit duty, 17,705,793*l.*; glucose duty, 120,679*l.*; saccharin duty, 13,832*l.*; licences, 4,412,578*l.*; railway-passenger duty, 345,061*l.*; and “miscellaneous” (coffee-mixture labels and home-grown tobacco), 9,677*l.* Beer, glucose, and “miscellaneous” were higher than the year before, and the other items less. England and Ireland drank more beer, the former over 100,000 barrels more, and Ireland about 39,000 barrels more; Scotland stands for less than 300 barrels more. The total for the three countries was 34,491,415 barrels, but some of the increase has to be reckoned as export on drawback, for while the actual consumption at home was greater than in 1906-7 (33,850,186, against 33,731,344 barrels), the consumption *per capita* was less—viz., 27.63 gals., against 27.81 gals. in 1906-7. The consumption of beer has steadily decreased during the decade. Ten years ago 4 gals. more was used *per capita*. The consumption of spirits is also decreasing. Out of 47,778,151 proof gals. distilled in the United Kingdom in 1907-8, duty was paid on 34,071,571 proof gals., the net receipts being 17,705,793*l.*; but 39,660,645 proof gals. of spirits were consumed, 7,153,700 proof gals. being Colonial and foreign spirits, equal to 0.90 proof gal. per head of population; the figure was 1.18 proof gal. in 1899-1900, since when the consumption has steadily decreased. Dr. T. E. Thorpe has already reported that more spirit in terms of bulk gallons was used for methylation during the year (*C. & D.*, July 25, p. 124). Here we find that 6,451,017 proof gals. were methylated—5,599,903 in England, 797,594 in Scotland, and 53,520 in Ireland, 4,111,456 proof gals. being industrial methylated spirit and 2,339,561 “mineralised.” The total shows an increase of 396,268 proof gals. over 1906-7. Last year 4,359 proof gals. of imported spirits were used—the first since 1904-5. Of other Excise duties we note that glucose reached its highest point, but saccharin receded from 247,677 oz. to 223,562 oz. Among Excise licences we find thirty-six makers of methylated spirits and 18,999 retailers, an increase in the latter of 411.

### Stamped Medicines

are the next item in the report of special interest to the drug-trade. The number of vendors in England increased last year from 38,166 to 39,023, and in Scotland from 3,187 to 3,249, or 819 on the whole. Medicine-stamps also yielded 7,000*l.* more, the following being the figures for the past ten years:

Year ended March 31	England	Scotland	Great Britain
	£	£	£
1897-1898... ..	258,725	2,127	260,852
1898-1899... ..	264,262	2,142	266,404
1899-1900... ..	286,504	2,323	288,827
1900-1901... ..	295,116	2,364	297,480
1901-1902... ..	304,195	2,142	306,337
1902-1903... ..	331,086	2,285	333,371
1903-1904... ..	321,172	2,274	323,443
1904-1905... ..	329,171	2,268	331,439
1905-1906... ..	321,543	2,569	324,112
1906-1907... ..	324,180	2,926	327,106
1907-1908... ..	330,735	3,407	334,142



In 1859-60 the duty yielded 43,692*l.*, and it reached six figures (114,323*l.*) in 1874-5. We need say no more than that. In connection with this duty we may mention that the Finance Act, 1908, Section 4, Sub-section 4, provides that the stamp-duties on medicines and playing-cards shall for administrative purposes be deemed to be Excise duties. This was foreshadowed in the *C. & D.*, May 23, p. 788, when we discussed the question of transferring the Excise branch from Somerset House to the Customs, which is given effect to by Section 4. Seeing that the administration of the stamp-duty laws will in future rest with the Commissioners of Customs in Thames Street, and not the Board of Inland Revenue in the Strand, it remains to be seen whether the new masters of the situation will in any way affect the interest of the chemist. Law, custom, and use for the last century and a quarter have termed this particular impost a "stamp-duty on certain medicines": now the Legislature has changed the name to an "Excise duty on medicines," an administrative distinction without a material difference. The licence remains the same, and the *pro rata* duty still stands. No other businesslike course was open to the Treasury than to place the control of the stamp-duty and licence-duty under the one head, and it is presumed that whatever office changes may occur in this transfer or absorption of the Excise into the Customs, facilities will still be granted to chemists for obtaining the medicine-stamps in their own or immediate locality. The "flitting" of the Excise branch to the Custom House has not yet been accomplished, and no date has been fixed for the removal. Until then Somerset House remains the place for chemists to address letters. The actual notice to quit will be an Order in Council.

### Controlling Proprietaries.

We mentioned last week that the New Zealand House of Representatives had before them a Bill the object of which is to control the sale of proprietary medicines. This has the misleading title of Quackery Prevention Bill, whereas the text shows that it is intended to prohibit the sale of fraudulent proprietary medicines. The following is the text of this measure:

1. This Act may be cited as the Quackery Prevention Act, 1908.
2. It shall not be lawful to advertise or supply any preparation, medicine, or appliance alleged to be for the prevention, alleviation, or cure of any human ailment or physical defect that is declared by a Judge of the Supreme Court, on the application of the chief health officer, to be harmful to health, or of a fraudulent nature, or of such a character that it cannot have the effect claimed for it, or cannot effect the purpose for which it was supplied.
3. Every person who commits a breach of the provisions of this Act is liable to a fine not exceeding fifty pounds.

This new Bill for obtaining control of the sale of proprietary medicines seems to be unobjectionable in character and quite in accordance with the assurances which Dr. Mason gave to the delegates sent out by the Proprietary Medicines Section of the London Chamber of Commerce. No objection can be taken to giving control to the Government over the sale of fraudulent or harmful medicines, previous efforts in this direction having been of such a nature that honest proprietary medicines which have become universal household remedies have been classed with the disreputable compounds whose sale depends upon persistent misrepresentation.

### Orange River Colony Bill.

In publishing the news a fortnight ago about the Bill (since withdrawn) dealing with the sale of poisons and proprietary medicines in Orange River Colony, we mentioned that the Pharmaceutical Society there had appealed

to the London Chamber of Commerce for assistance, if required. The Chamber has issued a reprint of the draft Bill, with a covering letter, in which the Secretary says:

It is satisfactory to note that, owing to the strong opposition of the Pharmaceutical Society at Bloemfontein, the Bill has been withdrawn, but it has been thought well to call the attention of manufacturers and owners of proprietary medicines to the proposals contained therein, which will, it is reasonable to anticipate, probably be re-introduced (possibly in a modified form) in a future Session of the Colonial Parliament, in which event action by those concerned will be necessary to protect their interests.

If we may judge from the inquiries we have received, there has been a good deal of interest in the Bill in this country, consequent upon the information given in the *C. & D.*, and satisfaction has been expressed that the measure has been withdrawn.

### Prizes for Chemical-workers.

The Industrial Society of Mulhouse this year include awards interesting to pharmacists in their list of annual prizes for research-work in industrial chemistry and mechanics, principally in connection with the dyeing and bleaching industry. Silver medals are offered for the synthesis of a gum possessing the properties of Senegal gum, and also for a handbook treating of the drugs used in the dyeing and printing industries; a medal of honour is offered for an economical substitute for dried egg-albumen, or for a decolourised blood-albumen for the same purpose. Other awards will be given for papers on the colouring-matter or on the carmine in cochineal, theory and manufacture of alizarin reds, composition of aniline black, transformation of cotton into oxycellulose, composition of colouring-matter and synthesis of a natural colour, various mordants, bleaching processes, and colours, etc. Papers, designs, etc., must be sent in before February 15, 1909, to the Président de la Société Industrielle de Mulhouse, Alsace-Lorraine, from whom further details may be obtained.

### The Basic Principle.

We insert in this issue the third and last of a series of remarkable letters which a gifted observer of pharmaceutical events has contributed to our correspondence columns. These are not to be regarded as an apologia for extremists who will have no amendment of the Pharmacy Acts at all unless corporate bodies are specifically prevented from using the title "chemist and druggist" or other title which the framers of the 1868 Act intended should be acquired and used only by individuals. Our contributor reaches a higher level than that in his appeal to all concerned with the amendment of the law to consider and reconsider the objects of the 1868 Act, and not to give Parliamentary sanction to the system of trading contrary to the spirit of the Act, which the Courts have ruled to be outside its penal provisions. If it be possible to put in a sentence the closely reasoned pronouncements of our contributor we should say: "Give statutory effect now to 1868 intentions, and for the future ensure that there will be no recurrence of the unstatutory manner of carrying on the business of chemists and druggists." This proposition as elaborated by our contributor may appropriately be considered now, when the political atmosphere is calm, and before the House of Commons takes up the Poisons and Pharmacy Bill where the House of Lords left off.

### American Tariff Revision.

From time to time there have been indications of growing dissatisfaction in the United States with the present Dingley Tariff, and on several occasions delegations of dissatisfied manufacturers have visited White House with the object of obtaining the appointment of a commission to consider the advisability of revision. Such deputations, however, have



received little encouragement beyond the promise that the Republican leaders are willing to renew their pledge to revise the tariff "after the next presidential election," the excuse being that the necessary inquiries must be of so exhaustive a character that they can only be undertaken after the forthcoming election, which is in November. President Roosevelt and Mr. Taft have promised a measure of tariff revision in the way of a reduction in duties; but Mr. Bryan is deeply pledged to reduce the tariff to a scale of duties for revenue purposes only. Now, just before the eve of the election, there is greater desire than ever to make inquiries with regard to tariff revision, and with that object the Government have sent a request to the United States Consul at Birmingham (Mr. A. Halstead) for information as to the cost of labour, materials, conditions, cost of production, etc., of exports to the United States. Mr. Halstead has therefore issued a circular which has aroused considerable interest. He asks to be supplied with information which he admits may be regarded as "business secrets," but he promises that it shall be treated as confidential. Many firms resent the inquiries, looking upon it as an attempt to obtain trade secrets. The Consul has, however, issued a statement repudiating this suggestion. His application, he says, was made at the suggestion of his Government, and he is surprised at the indications of their suspicion, there being no basis for the apprehension. We feel sure that the British manufacturer will be well able to take care of himself in regard to furnishing what are "trade secrets," and who can tell in these days of acquisitiveness on the part of American consuls, whether eventually the information may not be used to the detriment of British manufacturers in a manner now unforeseen. We understand the schedule contains fifteen main questions, in addition to a number of supplementary questions. In justification of the circular Mr. Halstead gives a long explanation in "The Times," pointing out that public sentiment is favourable to a reduction in the tariff, and to the belief that industrial and economic conditions have so changed since the enactment of the law of 1897 that a readjustment of the tariff schedules involving a reduction of duties is desirable, and, in his opinion, a reduction of duty seems highly probable.

#### Deaths under Anæsthetics.

We are in a position to state that the negotiations which were set on foot—as the result of several questions which were addressed to the Home Secretary in Parliament before the adjournment for the summer recess—between Mr. Gladstone and Dr. Donald MacAlister, President of the General Medical Council, as to the desirability of instituting an inquiry into the question of deaths under anæsthetics are still proceeding, and that when the House of Commons reassembles in the course of next month, Mr. Gladstone will probably be in a position to announce the decision which he and his advisers have arrived at in the matter. Before the rising of the House it was stated that the Home Secretary was endeavouring to get the General Medical Council to make the administration of anæsthetics a compulsory part of the medical curriculum, but, as a matter of fact, the whole question has been prominently before the Council for the past two years or more. The matter was brought forward at the session of the Council in November 1906 (see *C. & D.*, 1906, II. 877), and a recommendation was made by the Education Committee that instruction in the administration of anæsthetics should be given in the fifth year of the medical curriculum. This recommendation has already had a beneficial effect upon the attitude adopted by the various licensing authorities which work in connection with the central Council in London, so that the question may be said to be working out its

own solution. In the meantime, we are informed that Mr. T. A. Bramsdon, M.P., Coroner for the Portsmouth District, who was the first Member of Parliament to call the attention of the Home Secretary to the matter, is in communication with Dr. Waldo, Coroner for the City of London, and a number of additional cases of deaths under anæsthetics which have occurred since Parliament rose for the summer recess have been collected with a view to their being set forth in detail in a further interrogatory which is to be addressed to the Home Secretary as soon as Parliament reassembles in October. It is probable also that the request for the appointment of a Royal Commission or Select Committee to inquire into the whole matter will be repeated, but although it is not at all certain at the present moment that Mr. Gladstone will be in a position to promise the introduction of legislation at an early date, the belief prevails in well-informed quarters that he is not likely to be willing at the present juncture to recommend the appointment of a Commission or Committee of inquiry which must obviously be of a somewhat controversial and protracted character.

### Tr. Hyoscyami Recentis.

By E. W. POLLARD, B.Sc.

**H**ENBANE grows luxuriantly in a few spots in the Isle of Wight. I recently took advantage of a half-day holiday to collect about 7 lb. of the herb, which was in the pink of condition, during the first week in June. After removal of stalk and partial drying from a day or two's exposure, this weighed 4 lb. and contained 80 per cent. of water. The dry material yielded 0.16 per cent. of alkaloid. A tincture of the fresh herb was made on the same lines as that by John Barclay ("Year-Book," 1902), 2½ pints of alcohol (90-per-cent.) being added, and the whole macerated for a week, then pressed. To the marc 1½ pint of alcohol (45-per-cent.) was added, and the mixture pressed again. The resultant tincture measured about 5½ pints, the comparatively high loss being due to the use of a rather small press. It had sp. gr. 0.956, and yielded 2.9 per cent. of extractive. The aroma and colour were incomparably superior to the official tincture, and the tincture keeps much brighter and "cleaner" than the B.P. preparation, there being practically no deposit on the sides of the dispensing-bottle.

#### A SOUTH AMERICAN PHARMACY.

THIS "Farmacia Nacional" is situated in Callejón de Mercado, Barranquilla, Colombia, and is owned by Messrs. J. A. Gonzalez & Co., pharmacutists and drug-



gists. They carry on a wholesale as well as retail business, and as importers they use THE CHEMIST AND DRUGGIST regularly.



## British Pharmaceutical Conference.

The following is the list of papers, with the names of the authors, which the Executive Committee have accepted for the meeting at Aberdeen on September 15 and 16:

- "The Strychnine Standard for Preparations of Nux Vomica," by Dr. W. E. Dixon and Robert Wright, F.C.S.  
 "The Characters of Official Iron Arsenate and the Preparation of a Soluble Ferric Arsenate," by Dr. F. B. Power and Harold Rogerson.  
 "Note on Formic Acid and Some Formates," by George Lunan, F.C.S.  
 "Notes on some B.P.C. Formulas," by Harold Wyatt.  
 "Tasteless Liquid Extract of Cascara Sagrada," by Ernest Quant.  
 "Commercial Pilula Hydrargyri," by Gilbert Simpson.  
 "Valenta's Test for Oils," by E. W. Pollard, B.Sc.  
 "Notes on Commercial Lead Plaster and Litharge," by E. F. Harrison, B.Sc., F.I.C., and H. E. Watt, D.Sc., A.I.C.  
 "Phases of Pharmacy in Scotland—An Historical Sketch," by J. P. Gilmour.  
 "Scammony and Jalap Resins," by W. B. Cowie.  
 "Note on Commercial Ethers," by W. B. Cowie.  
 "Emplastrum Plumbi," by W. B. Cowie.  
 "The Alcohol Solubility of Resin of Podophyllum," by Samuel Taylor.  
 "Some Powdered Drugs," by F. H. Alcock.  
 "The Seeds of Garcia Nutans," by Professor J. Theodore Cash, M.D., F.R.S.  
 "Determination of Mercury in Unguentum Hydrargyri," by P. H. Crewe.  
 "Charas," by David Hooper.  
 "Standards for Alkaloidal Drugs and Their Fluid Extracts," by J. C. Umney and C. T. Bennett.  
 "The Electrolytic Administration of Drugs," by T. Maltby Clague, A.I.E.E., Ph.C.
- The paper on paraffin-ointments, which was mentioned in the preliminary list, published on August 22, will not be read, as the author will not be able to complete the work before the Conference meeting.
- We are asked to remind Londoners who intend going by steamer to Aberdeen that they should communicate at once

Mrs. Reith, Mrs. Giles (convener), and Mrs. Leslie; *bottom row*, Mrs. Bruce, Mrs. Ness, Miss Ritchie, and Mrs. Simpson. During the Conference week these ladies will wear badges consisting of a bunch of Scottish bluebells and corn clasped with a silver thistle buckle. The members of the Local Executive Committee (gentlemen) will wear a Gordon tartan rosette as a badge. That, as far as our knowledge of tartans goes, has a ground not unlike the Black Watch tartan, with yellow cross stripes on it.

Conference members who golf should take their sticks with them to Aberdeen. An excursion to Cruden Bay has been arranged for Friday, September 18. It will be by train from Aberdeen, and golfers will be "deposited" at Cruden Bay platform, while others will be run on to the Bulls O' Buchan platform, so that they may have a nice walk back to Cruden Bay along the rocks, passing by the way Slains Castle, which is at present occupied by Mr. Asquith, the Prime Minister, whom the golfers may meet on the links, as he has a round there almost daily. High tea will be served in the Cruden Bay Hotel about 5 or 5.30 p.m. Those who think of joining this party should write to Mr. W. F. Hay, 29 Rose Street, Aberdeen, to whom also all who think of attending the Conference should communicate without delay.

## Information Wanted.

Inquiries for the names and addresses of manufacturers, or other trade information, not traceable by reference to the advertisement-pages of "The Chemist and Druggist" and the "C. & D. Diary," or not filed in our private register, are inserted here free of charge. Postcard or other replies to any of the subjoined inquiries (addressed to the Editor "The Chemist and Druggist," 42 Cannon Street, London, E.C.) will be esteemed.

- 27/21. Makers of automatic weighing-machines.  
 33/54. Makers of Henry's Brown Windsor soap.  
 34/70. Where can desiccated soups be purchased in bulk?  
 33/51. Makers or agents for "Vegetable Albumen Food."  
 33/6. Who is the maker of a dentifrice called Wood's "Toothbright"?  
 34/25. Where can Hilaire's tablets for preserving food be obtained?  
 36/24. Address of Glasgow chemist selling Scotch Heather soap during exhibition year.  
 33/62. Makers of the "Progress" dressing-combs, "non-inflammable and of superior finish."

## Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

BOOTS, LTD., are opening a new branch at Church End, Finchley, London, N.

MESSRS. LEWIS & BURROWS, LTD., have opened a new branch at 66 Uxbridge Road, Shepherd's Bush, London, W.

MESSRS. TUGWOOD WILTON (Audosol Disinfectant Co.) have removed their offices from the works, 173 High Street, Shadwell, E., to 32 Fenchurch Street, E.C.

THE PHARMACY of the late Mr. J. G. Alexander, chemist and druggist, at 45 Bank Street, Galashiels, has been transferred to Mr. B. Cartwright, chemist and druggist, 50 High Street, who will continue it as a branch establishment.

CHINESE WOOD OIL.—Among the chief exports from Shasi last year were 1,242 cwt. of wood oil, as compared with 1,222 cwt. in the preceding year.



THE LADIES' COMMITTEE.

with Mr. Mutch, Aberdeen Steam Navigation Co., Limehouse, E. The requisite number to secure the special terms offered [single fare (30s.) for the double journey] is not yet made up, but it should be if that fraternal amity, so much desired in pharmacy, is exercised.

The photograph of the ladies' local committee given above was taken this week. The names of the ladies are, from left to right, *top row*, Mrs. Craig and Mrs. Tocher; *middle row*,



## Association Affairs.

### Drug-stores Association.

A MEETING of the Nottingham and District Branch of this Association was held at the Albert Hotel, Derby Road, Nottingham, on Tuesday, August 25, Mr. Hunt (Netherfield) in the chair. Mr. W. Huntrods (Leeds), in an address gave a brief outline of the nature of the work which had been carried out in the interest of all unregistered chemists during the past six months. At the close of the address questions were asked, and a discussion on the various matters named followed. Mr. Hunt, in proposing a vote of thanks to Mr. Huntrods, said he was sure they all fully appreciated the efforts put forth by the Council, which, he believed, would be eventually successful.

### Northern Counties' Optical Society.

At a meeting of this Society, held at Newcastle-on-Tyne on September 2, Mr. Robert Tocher, pharmaceutical chemist, Glasgow, read a paper entitled

#### THE OPTICAL SITUATION.

The first part of the paper was historical, the purpose being to show that opticians have existed from time immemorial. The study of the refraction of the eye was traced to Sir George Airy, who invented a method of correcting astigmatism of the eye. It is, however, less than twenty-five years ago since satisfactory corrections have been possible for complicated refractive errors. After referring to exact refraction as the basis of a new profession which is being separated from the business of the optician, Mr. Tocher defined the refractionist as "a person who can estimate and correct the refraction of the eye; a person skilled in sight-testing"; or, "a person having a thorough knowledge of general physical optics and a special knowledge of visual optics." There is plenty of scope for the exercise of the profession, but the number of competent men is at present small. It was laid down by the lecturer that no person—medical practitioner and chemist-optician included—should be permitted to test sight until he has proved himself to be a competent refractionist. It is quackery to attempt to test sight without a special knowledge of visual optics. A pure refractionist does not stock ready-glazed spectacles; he has the glasses of his clients made to order, and it is in this that he differs from the ordinary spectacle-seller. It is surprising to find how many medical men there are who are opposed to non-medical men testing eyesight, as if the former had any more right to test sight than the latter. It should be remembered that medical men took up sight-testing only at a recent date, whereas the jeweller-optician has been doing his best at it for the past 500 years. It is strange that these very medical men do not offer the slightest objection to persons who sell glasses without having previously tested the sight of purchasers, but the moment the optician advises or gives the slightest help to the purchaser in the selection of his glasses, or attempts to test the sight, he commits an unpardonable sin. Refraction is not a branch of medicine—it is a branch of physics.

On no account should it be thought that sight-testing by non-medical men is opposed to the interests of medical men. Mr. Tocher further showed that medical men do not receive during their curriculum any instruction in subjective sight-testing, which is the most important part of visual optics. The lecturer then quoted statistics to prove the need for more skilled refractionists—there are at present only 2,000 for forty-four million people—whilst 75 per cent. of the people who are using spectacles are wearing the wrong glasses. The remedy, in the lecturer's opinion, is to be found in optical legislation, the first step to which is the amalgamation of the British Optical Association and the Spectacle-makers' Company. Finally the lecturer

warned his hearers that the possession of a diploma should not be regarded as the final step in his education. The refractionist must go on studying day by day; he will discover things he never knew before, and see more clearly that the field of study in his profession is inexhaustible.

## Summer Outing.

### Daisy at Knaresborough.

THE employes of Daisy, Ltd., went to Knaresborough on August 22 to celebrate the recent marriage of the manager, Mr. John Lawson, Ph.C. Arriving about one o'clock, the afternoon was spent in visiting the various places of interest in the district, including the well-known "Dropping Well" and the "oldest chemist's shop in England," the fine and sunny weather adding materially to everyone's enjoyment. A company of sixty-two gathered for tea at the High Bridge Private Hotel, but several of the employes were unable to attend. A vote of congratulation on their recent marriage and thanks for the afternoon's entertainment was proposed by Mr. Jones at the close of tea to Mr. and Mrs. Lawson. He wished both long life and every happiness. He said that the directors had every confidence in their manager, and the prosperity which "Daisy" had enjoyed during recent years was due in no small measure to Mr. Lawson's experience as a pharmacist, and to his energy and business ability in the interests of the firm. Mr. J. A. Haigh (senior representative) and Mr. W. Boddy (foreman, printing department), and Mrs. Jones (managing director) briefly endorsed Mr. Jones's remarks.

Mr. Lawson, in replying, said, in looking upon his wedding-day as a red-letter day, he thought that a man could not celebrate such an occasion better than in the company of those with whom he worked day by day. Mr. Lawson thanked the speakers for their kind words



GROUP OF EMPLOYEES OF DAISY, LTD.

and the employes for a handsome marble timepiece presented on the wedding-day, and the directors also for the cheque and pair of silver vases which he had received. Speaking of the future, he thought that even greater prosperity awaited the company, and remarked that their success depended largely on the loyalty and hearty co-operation of every member of the staff.

The above photograph was then taken, the party leaving Knaresborough about nine o'clock.

OVER 1,000 tons of soaps of various kinds are imported annually into the Bahia district. Of that quantity but an insignificant proportion is of British manufacture.



## Optical Observations.

By A Chemist-Optician.

### OPTICAL LEGISLATION.

Colonel Davies Sewell, the well-known Clerk of the Spectacle-makers' Company, has contributed his views on optical organisation in Great Britain to the "Optical Journal" (U.S.A.). The article is one of a series dealing with optical organisation, education, and legislation. Colonel Sewell refers in an interesting manner to the desirability of legislation in Great Britain for the registration and protection of qualified refractionists, but the Optical Bill must be so framed as to secure proper advantages to the optical profession and the public without inflicting hardship or injustice in other directions. The Bill which was introduced in the House of Lords two years ago received a substantial measure of support from both political parties in both Houses, but had to be withdrawn because of the opposition of a section of the trade. If the agitation for State recognition is to be revived, it must be undertaken in a spirit of cordial unanimity, otherwise it seems possible that representatives of the medical interest may profit by the divided counsels of the opticians, intervene as "expert and independent" arbiters in the wrangle, and succeed in transforming what was intended to be a charter of liberties into a restrictive and perhaps oppressive measure fatal to the interests of the trade. Colonel Sewell then gives reasons why the Spectacle-makers' Company enjoys a larger measure of confidence than other trade-bodies, and is worthy of the position it occupies in the optical industry.

### CHILDREN'S EYESIGHT.

The Tottenham medical officer of health (Dr. J. F. Butler Hogan) states in his annual report that during the year over 300 school-children were found to be suffering from visual defects, chiefly myopia and astigmatism. Mr. Sharland, 7 and 8 Thavies Inn, Holborn Circus, E.C., supplies the glasses at 10d. for spherical and 2s. 6d. for cylindrical lenses; and Mr. C. N. Coles, chemist and druggist, 804 High Road, Tottenham, has also undertaken to supply glasses to the children in the Tottenham schools at prices varying from 2s. 6d. to 7s. 6d.

The medical officer of health for Willesden (Dr. W. Butler), in his annual report, gives some particulars of the sight-testing that has been carried out in the schools. He states that children with subnormal vision, who constitute a large proportion of scholars, should all be re-examined by the school medical officer, and in those cases which he reports as urgently in need of glasses greater pressure should be put upon the parents than is possible under the existing procedure. Of 5,115 boys examined, 35.7 per cent. were found to have slightly defective vision, and the percentage of scholars with seriously defective vision was 10.25 per cent. The percentage of the total number of boys wearing glasses was 2.92. Of 5,145 girls examined, 47.85 per cent. had slightly defective vision, and there were 14.6 per cent. with seriously defective vision. The percentage of the total number of girls wearing glasses was 3.96 per cent. It is not stated by whom the tests were made.

### FRAME-MEASURING.

I have had some interesting queries sent me which I think will be of general interest to those engaged in optical work. The first refers to an apparent contradiction in "The Chemist-Optician" in the matter of frame-measurement. My correspondent writes as follows:

On p. 42 it states the bridge is measured for in or out from back plane of eyewires, but on p. 46 it is measured from the front; which is correct?

The best way is to measure from the back plane when taking frame measurements so as to allow for eyelash clearance. Some opticians go further when frame-fitting, and take the centres of the lenses as a plane, as in the case of a very deep convex it might make a difference of about 2 mm. to the measurements. The paragraph on p. 46 is a description of a frame rule, and it is customary when using a rule of this description to place the frame at right angles to the edge of the rule, so that the bridge projects over the upright scale, and thus get the outset or inset.

### FRAME-RULES.

To my mind there should be a very good opening for a simple rule which will take all the required measurements from one position without having to set the frame in one or two different ways, and although there are several good rules on the market they are more or less complicated in use. If any chemist-optician can evolve a simple one he will be conferring a benefit on himself and many other refractionists whose time is limited.

### TINTED LENSES IN TRIAL-CASES.

Another query deals with the smoked and blue lenses supplied in trial-cases: Are they of any use, and, if so, what is their advantage in testing? No information is available in any of the text-books; but the three purposes for which they are used that occur to me are: (1) They are very handy when testing the imbalance of the muscles with a red Maddox rod on the prism-chart to tone down the illumination of the other eye, so that the light is more nearly equalised, until the streak and the image of the flame have approximately the same brightness; (2) the tinted trial-lenses are useful for trying which tint is the most suitable when prescribing tinted glasses for general or outdoor wear; and (3) they can be employed for matching tinted lenses which may be brought in for repairs or repeat orders. These accessories are not, however, in frequent use in everyday work, and might easily be replaced by something more useful to the refractionist. Most wholesale houses would do this if requested at the time of purchasing a case.

### THE QUESTION OF PRICES.

Probably the most difficult of the inquiries I have to answer is one dealing with prices.

What is a fair price, in a working-class neighbourhood, for frames and clips in  $\frac{1}{10}$ th gold-filled material?

This is a point which can only be determined by an intimate knowledge of the surroundings, the class of people, the conditions of labour and wages in the district, and also the amount of competition. To my mind it is better to stock gold-filled goods in  $\frac{1}{10}$ th quality, as the difference in cost is not excessive, and a better article can be supplied with a safe assurance as to its wearing powers. Good eurl-side frames in  $\frac{1}{10}$ th material can be had at about 36s. a dozen, and astigmatic clips at about 39s. a dozen. For these it should be easy to obtain 10s. 6d. to 12s. 6d. a pair for sphericals, thus allowing a very fair margin of profit. I have found from experience that working-class people will always pay a fair price readily for a good article, in fact much more so than people who are supposed to be in a better social position, but who perhaps have to keep up a good appearance on the same or lower income. I have always made it a practice to charge the same price throughout for frames, folders, and clips in the same quality material, as it avoids a good deal of explanation, and there is always a possibility of selling a chain with a pair of clips, thus helping to make up the difference in cost. I am aware that higher prices than these are obtained in many instances, but in large towns there are generally one or two firms who show goods in the windows at these prices, and the class of customer in question is generally well informed of this and expects to get glasses at advertised prices. The question is gone into at some length in "The Chemist-Optician."

**THE Dullest Day for Druggists.**—According to inquiries of a "Daily Mail" representative on August 24 the quiet day in the week for chemists in the centre of the Metropolis is Saturday, and in the suburbs Monday.

**SNAKE-VENOM: HOW IT WAS OBTAINED.**—A supply of rattle-snake-venom has been obtained by Dr. Goodwin at the Hungarian Exhibition, Earl's Court, London, S.W., and, according to the "Daily News," "the poison is valuable as an ingredient in a famous prescription for the treatment of insanity." The snake was caught up by "Osca, the Arizonian wonder," by means of a long wire and laid on the operating table, Osca, "quick as a flash," pinning it with his thumb and forefinger. A saucer with a piece of cheese-cloth over it was placed in front of its head by Dr. Goodwin, and the reptile, shooting out its forked tongue, clasped the cheese-cloth between its jaws, discharging the contents of its poison glands into the saucer, giving, according to the doctor, a supply sufficient for nearly a century.



## The Week's Poisonings.

ELEVEN fatalities with poisons have occurred during the week, including five misadventures. Seven of the poisons taken are on the Schedule, including three in the first part. Samuel E. Mason, an independent gentleman of Dover, who was to appear before the Magistrates on a charge of travelling on the railway without a ticket, committed suicide by taking prussic acid.—John Stimson, relieving officer, Bulmer, Sudbury, wrote resigning his position, and on the union officials visiting his residence he was found dead in a chair from strychnine poisoning.—Two children at Thornton Heath obtained a box of pills during the absence of the temporary nurse, the elder (3) eating one and the younger (14 months) swallowing three; the latter died in consequence. At the inquest each pill was stated to contain  $\frac{1}{10}$  grain of strychnine.—The usual verdict was returned at the inquest on the body of Thomas Headon, elective auditor, Launceston, who was found dead in an empty railway carriage with a bottle containing oxalic acid on the seat.—George A. Ware, a London music-hall agent residing in Clovelly Mansions, Gray's Inn Road, died from the effects of oxalic acid poisoning. At the inquest a verdict of death from misadventure was returned. The Coroner said it was just possible the chemist might have made a mistake, and deceased may have supposed he was mixing salts with the soda. No oxalic acid was found in the house except in the tumbler, which was also stated to contain "bicarbonate of soda." Deceased was a chronic dipsomaniac and was in want of money.—William G. John, hotel cellarman, Pontypridd, died through an overdose of chlorodyne taken by misadventure. Deceased was a victim of the drug-habit.—Albert Saunders (25), seaman, Middlesbrough, was found unconscious on the bedroom floor, and expired on the following day. At the inquest death was stated to be due to an accidental overdose of laudanum.—Elizabeth H. Newall (33), Coundon, Bishop Auckland, committed suicide on account of sickness and diarrhoea by taking salts of lemon. Mr. George Richardson, chemist and druggist, Collingwood Street, said deceased purchased a quantity of salts of lemon for removing stains from clothing.—Harry Hawtree (46), a cripple who suffered from locomotor ataxy, committed suicide by taking salts of lemon at his home in Stowe Road, Shepherd's Bush. It was a case of imitative suicide. At the inquest Mr. James Thompson, chemist and druggist, 161 Goldhawk Road, said deceased asked for twopennyworth of salts of lemon to clean some straw hats, and in reply to the Coroner's question said salts of lemon was not a scheduled poison, and could be sold by any grocer as well as a chemist. The usual verdict was returned.—A similar verdict was returned at the inquest on the body of Mary H. Flint (35), Parkgate, Sheffield. Mr. W. Dabbs, chemist and druggist, assistant to Mr. J. T. Bolsover, chemist and druggist, 101 St. Ann's Road, Rotherham, stated he supplied deceased with 2 oz. of salts of lemon for removing iron-mould. He told her it was a virulent poison.—Harriet Benson (23), a young woman on tramp with her husband, died at West Bridgford hospital through eating some "poisonous berries."

## The Pharmacie Midy, Paris.

THE historical building has disappeared, and the first glimpse of the old corner occupied by a hoarding seemed strange. I entered the new pharmacy opposite, writes our Paris correspondent, and inquired for the proprietor.

"Dr. Bousquet? Certainly! But for any historical notes, why not address yourself to Monsieur Midy himself at his new wholesale house, 9 rue du Commandant Rivière, the street nearly opposite? You will find Monsieur Midy fils there now, I have no doubt."

I found Monsieur Midy fils, a tall, clean-shaven figure in laboratory costume and pince-nez, busy among his auto-claves in his ultra-modern laboratory, where an assistant

rhythmically stirred a mixture in a pan. He lent himself with smiling resignation to the ordeal of the interview.

"You represent, Monsieur Midy, the second generation, or the third?"

"The sixth."

"Six generations! I knew the pharmacy was an old one, but—"

"Well, not in Paris," he explained. "I mean my direct ancestors for six generations back have been pharmacists. My grandfather, like his predecessors, kept open shop at Douai, in the North of France. He sent his son—my father, M. Léon Midy—to study at the Paris Superior School of Pharmacy. My father engaged himself as assistant at the establishment you know so well under the name of the Pharmacie Midy, at the corner of the Faubourg St. Honoré and the rue de la Boétie. It was then kept by a M. Dusart; he was, by the way, from the North also, the Dusarts are numerous around Douai and Valenciennes."

"And he finished by buying the business?"

"Just so, in 1873. Well, he ran it, as you know, till last



year, when he sold it to his neighbour pharmacist, Dr. Bousquet."

"And that is all. I suppose successful pharmacies, like happy nations, have no history. And the English connection? And the numerous English chemists to whom the Pharmacie Midy recalls recollections of their assistant days?"

"Yes, my father always kept a qualified English assistant, and some of them are, I daresay, well known to you. Only to quote those who have succeeded in France, I might name Mr. Green, who is now in business on his own account with Mr. Nathan just opposite the Grand Hotel, and Mr. Fred Mason, who represents Rigaud's well-known firm in America, India, etc. My father did a wholesale business in English patents and special lines; he used to supply half the pharmacists of the Riviera with English goods at one time. Of course it was natural enough that he should specialise British articles, carrying on business in a cosmopolitan quarter where your compatriots have always been numerous."

"And now you are entirely disconnected with the retail business?"

"The three of us, my father, M. Léon Midy, and we two sons—our names are André and Marcel—confine ourselves to the wholesale branch here, having ceded the retail to Dr. Bousquet."

Dr. Bousquet will, of course, keep up the high standard of the house. His pharmacy has a handsome frontage, and to the English goods which have made the names of Allcock, Atkinson, Gosnell, Beecham, Condy, Dinneford, Elliman, Eno, Pears, Scrubbs, etc., familiar to us all, he adds a selection of the specialities of a few first-class German firms: Merck, Knoll & Co., and Boehringer. He has several special lines of his own, as well as the Piperazine and other goods connected with the name of Midy.

## WHERE TO STUDY.

THE following educational institutions are advertising in this issue:

South London School (Muter's), 325 Kennington Road, London, S.E.

Westminster College of Pharmacy, 402 Clapham Road, S.W.

London College of Chemistry, 323 Clapham Road, London, S.W.

North of England School, 55 Northumberland Street, Newcastle-on-Tyne.

Manchester College of Pharmacy, 225A and 227A Oxford Road, Manchester.

Northern College of Pharmacy, 100 and 102 Burlington Street, Manchester.

South of England College of Pharmacy, 186 Clapham Road, London, S.W.

City of London College, White Street and Ropemaker Street, Moorfields, London, E.C.

Brixton School of Pharmacy, 78 Stockwell Park Road, S.W.

## Essential Oil of Sage.

By T. F. Harvey, Ph.C., F.C.S.

BUT very few analyses of oil of sage have been recorded, and the characters of normal oils are not well known. Gildemeister and Hoffmann give the characters of the oil from *Salvia officinalis* as sp. gr. 0.915 to 0.925; rotation in 100-mm. +10° to +25°; 80 per cent. alcohol soluble in two or more parts; saponification number 107. Parry gives 0.915 to 0.930 for sp. gr. Schimmel & Co., in their "Report" for October 1907, give the characters of samples of oil distilled from Dalmatian and Syrian herb, as shown in the following table, where are also given the characters of clary oil from *Salvia Sclarea* (Muscetelle sage), and of twelve samples of Spanish sage oil as recorded by Parry (*C. & D.*, 1907, I., 263):

		S. G.	Rotation 100-mm.	Solubility in 80 % Alcohol	Acid No.	Ester No.	Saponi- fication No.	Total Borneol %	$\alpha_D$ at 20° C
1	Dalmatian from <i>Salvia offi-</i> <i>cialis</i>	0.9282	+10° 2'	0.8 volume and more	1.8	12.6	14.4	14.8	—
2	Ditto ... ..	0.9209	+4° 2'	1 volume and more	1.4	9.3	10.7	12.3	—
3	Syrian oil from <i>Salvia</i> <i>triloba</i>	0.9116	-3° 28'	ditto	—	10.3	—	—	—
4	Oil from Palestine (Schim- mel, Oct. 1905)	0.9175	-9° 35'	ditto	—	7.3	—	—	1.46734
5	Spanish Sage Oil (Parry)...	0.903 to 0.927	+7° to +25°	—	—	18 to 39	—	—	—
6	<i>Salvia Sclarea</i> ... ..	0.907 to 0.928	-19° 22' to -24° 1'	—	—	—	144	—	—

In their "Report" for April 1907, Schimmel & Co. state that the saponification number of 107 recorded by Gildemeister and Hoffmann was the only figure available at the time, and that it is not in keeping with their later experience, which has shown the saponification number for Dalmatian oils to be between 6 and 18. Such a result was to be anticipated, as among the constituents of sage oil no esters have been reported as being present. This constitutes a marked difference between it and clary oil, which probably contains linalyl acetate. The saponification values of the Dalmatian oils mentioned below fall within Schimmel's range of 6 to 18.

Wallach examined an oil distilled from large-leaved sage which was levorotatory and contained no trace of thujone. The oil marked "4" in the above table was stated to resemble in its properties the oil free from thujone examined by Wallach.

The following analyses, made in Messrs. Boots' laboratory by Mr. A. Tompkin, of four samples of Dalmatian oil and one sample of Spanish oil are of interest:

S. G.	Rotation in 100-mm.	Solubility in 80 % Alcohol	Acid No.	Ester No.	Saponi- fication No.	Total Borneol %	$\alpha_D$ at 20° C.	% V/ distil- ling below 170° C.	% V/v distilling 170-200° C.	% V/v distilling 200-220° C.	
0.9210	+12.45°	1 volume and more	1.6	6.7	8.3	9.9	1.4626	3	65	21	Dalmatian
0.9229	+13.62°	Ditto	2.2	6.9	9.1	9.5	1.4619	3	63	22	
0.9225	+ 9.93°	Ditto	2.2	7.0	9.2	10.5	1.4618	3	61	22	
0.9253	+10.23°	Ditto	1.3	8.5	9.8	14.8	1.4645	2	55	31	
0.9353	+ 9.60°	2 volumes	0.6	17.2	17.8	15.2	1.4619	13	64	10	
											Spanish

The normal constituents of Dalmatian sage oil are stated to be pinene, cineol, thujone, borneol, and possibly camphor. The respective boiling-points of these substances are 155°-156° C. (pinene), 176°-177° C. (cineol), 203° C. (thujone), 212° C. (borneol), 204° C. (camphor). It is evident that important differences in the constituents and characters of oil of sage from different countries occur. While Dalmatian oil is referred to *Salvia officinalis* and Syrian oil to *Salvia triloba*, the Spanish oils are different in character, and may be derived from a different species of *Salvia*.

Dalmatian oil may be taken as the type of ordinary sage oil, and its characters as so far recorded are:

Specific Gravity	...	...	0.915 to 0.930
Rotation	...	...	+4° to +25°
Solubility in 80 % Alcohol	...	...	1 vol. and more
Acid Value	...	...	1.3 to 2.2
Ester Value	...	...	6.7 to 12.6
Saponification Value	...	...	6 to 18
Borneol (total)	...	...	9.5 to 14.8
$\alpha_D$ 20° C.	...	...	1.4618 to 1.4615
Distills chiefly...	...	...	170° to 220° C.

Other thujone-containing oils are those of tansy, absinthe, thuja, and *Artemisia Barrelieri*.

## Japanese Jottings.

TOKIO EXHIBITION POSTPONED.—In carrying out their new financial programme, which is one of considerable

retrenchment, the Japanese Government announce that the Tokio Exhibition, which was to have been held in 1912, has been indefinitely postponed. This proposal has been strongly condemned by business men in Tokio; but the Government point out that it is impossible to complete the preparations by that date.

REMNANTS OF BARBARISM.—Two employes at a Kobe asylum have been arrested for dissecting a dead patient for the sake of the liver, which they had removed, cut up in small pieces, and hung up to dry. The men confessed that the liver was intended for sale to a Chinese druggist for use as one of the ingredients in a medicinal proprietary. The manager of the Kasugadicho Crematorium has likewise been convicted of stealing human skulls, while two brothers employed at the Yokkaichi Crematorium, in the province of Ise, have been arrested for traffic in human skeletons for medical purposes. The last-mentioned culprits sold human brains, human fat, and ashes of corpses.

SMUGGLING.—The Kobe Revenue Bureau have issued a

warrant for the arrest of Katsuno Torajiro, of Fukiai, who had been secretly manufacturing alcohol and sending it to Osaka packed as kerosene oil. This had been going on for a year. In making a search of the man's house, the authorities discovered a still and seventy koku of alcohol (1 koku=59 imperial gallons). He had no licence. The tax on alcohol is 75 sen per gallon, and with the special war-tax added the total amount on 70 koku is 800 yen. Five times the amount of the tax evaded has to be collected on illicit spirit, so that Katsuno is liable to a fine of 4,000 yen. The man absconded, but an accomplice was arrested.



## Prescription Problem.

THE facsimile reproduction given in our issue of August 22 was easy for competitors, and threatened (with due care on their part) to be difficult to adjudicators. We began to receive postcard renderings of the prescription on Friday, August 21, at 11 A.M., and they continued to come in steadily every post until Saturday, August 29. We were interested, and doubtless readers will be, to note when and where postcard renderings were posted on August 21. We accordingly append a list of the postmarks of that date:

Arbroath, 9.45 P.M.	Leigh, 2.15 P.M.
Ashford, 12.15 P.M.	Liverpool, 10.15 P.M.
Ashton-in-Makerfield	London, E.C., 1 P.M.
Bath, 2.30 P.M.	London, W., 3.45 P.M.
Birmingham, 2.45 P.M.	London, W.C., 2 P.M.
Bristol, 10 A.M.	Moseley, 12.15 P.M.
Brompton, S.W., 7.5 P.M.	Newcastle-on-Tyne, 3.15 P.M.
Burton-on-Trent, 11.45 A.M.	Nottingham, 4.45 P.M.
Cardiff, 12.15 P.M.	Nuneaton, 9 P.M.
Chapelton Road, Leeds,	Plaistow, E., 11 A.M.
11.45 A.M.	Portsmouth, 5.30 P.M.
Chesterfield, 5 P.M.	Prestwich, Manchester, 8.15
Doncaster, 1.15 P.M.	P.M.
Dundee, 7.30 P.M.	Rainhill, 8 P.M.
Durham, 2.30 P.M.	Ripon, 9 P.M.
Ealing, W., 9.30 A.M.	Roundhay, Leeds, 7.15 P.M.
Edinburgh, 7 P.M.	St. Anne's-on-the-Sea, 8 P.M.
Finsbury Park, N., 10.30 A.M.	Sheffield, 1 P.M.
Fulham, S.W., 9.15 A.M.	Southampton, 11.30 A.M.
Gainsborough, 12.45 P.M.	South Normanton, 6.15 P.M.
Glasgow, 8 P.M.	Southport, 6 P.M.
Gloucester, 7.30 P.M.	Sunderland, 3 P.M.
Grange-over-Sands, — P.M.	Teignmouth, 11 P.M.
Great Yarmouth, 10 P.M.	Upminster, 3.45 P.M.
Haddington, 6.15 P.M.	Warrington, 9.15 P.M.
Harrogate, 10 P.M.	Whitby, — P.M.
Hounslow, S.W., 9.15 A.M.	Wigan, 3.30 P.M.
Ilford, E., 9.45 A.M.	Wotton-under-Edge, 6.30 P.M.
Knighton, 9 P.M.	

Many of the cards were posted an hour or two before the postmarks. The following are examples:

Ashford, Kent.—C. & D. received 11.30, card posted 11.35 A.M., postmark 12.15 P.M.

Doncaster.—C. & D. received 11.20 A.M., card posted 11.35 A.M., postmark 1.15 P.M.

Rapidity of action is commendable, but it is advisable in this matter to take all the time possible up to the next postal collection. Not a single Scotch card posted on August 21 was strictly correct. The prescription was as follows:

Jany 30 03  
No 6 R (Tr. Cantharid)  
Jan 30 1908 Glycerin aa 5vi  
Ft lin

Practically all the postcards gave the first date, but very few gave the second, and all the cards (over two hundred) except three were right as to the ingredients. The errors were as follows:

Lt. crotonis	
Glycerin	... aa 5vi.
Tr. coni viridi	
Glycerin	... aa 5vi
Vi cantharides	
Glycerin	... aa 5vi.

One of the competitors remarks: "I make first line Tr. Cantharidis, omitting the last i. Glycerin seems plain enough, but why ( )?" A reasonable reply to this is afforded by a Belfast postcard, viz.:

The stroke above cantharides and brackets enclosing Tr. Canth. are added by the prescriber to emphasise the preparation.—R. I. EDWARDS.

We promised three prizes. The Metropolitan prize goes to Mr. G. L. Austin, chemist, Hounslow; the Provincial prize is awarded to Mr. W. H. Oswell, 161 High Street, Burton-on-Trent; and the remaining prize to Mr. D. Bruce, c/o Mr. John Hutton, 8 High Street, Brechin. Copies of the "Chemist Optician" will be forwarded to the winners.

We again offer similar prizes for postcard renderings of the following:

*R. King in the ... 31*  
*John ... 31*  
*tracing.*  
*R. ... 31*  
*magical. 31*  
*again ... 31*  
*31 ...*

Postcards should be posted to us not later than Wednesday, September 9.

## Medical Gleanings.

### Laxative in Fistula-treatment.

For regulating the bowels in the treatment of fistula, Dawson ("Hospital," August 29, p. 571) recommends the following:

Pulveris jalapæ compositi	... gr. xv.
Pulveris sennæ alexandrinæ	... gr. xv.
Sulphuris præcipitati	... gr. xx.
Aquæ destillatæ	... 3j.
Theriacam opt. ad	... 3j.
Misce. Fiat confectio.	

Sig.: A teaspoonful to be taken at bedtime.

### Warts Cured by X Rays.

"THE HOSPITAL" (August 29, p. 578) says it is worth while to know that the very simplest way of getting rid of a wart is by a single application of the x rays. The time required for a sitting is fifteen to thirty minutes, and no dressings are required. The wart drops off within a week or ten days afterwards, leaving behind it smooth healthy skin.

### Constipation-cures.

SCHMIDT has asserted that in habitual constipation the food is used up beyond the normal limits, so that the faecal material resulting becomes hard and too small in quantity to stimulate the intestine sufficiently to empty itself regularly. On this theory, the disturbance of digestion is the primary cause, and the deficient intestinal motility a secondary condition. K. Blümel and H. Ulrici ("Deut. med. Woch.," July 2, 1908) contend that want of bodily exercise, unsuitable diet, and habitual suppression of the normal action are the predisposing factors. Massage of the abdomen, glycerin injections, enemata, etc., frequently fail to restore the natural action, and they therefore fall in with Schmidt's view that if the quantity of the motion can be increased the best conditions for cure will be assured. A mixture of agar-agar and extract of cascara, called "regulin," serves this purpose well, but it is too dear. Bran, cork, sawdust, and sand have all been suggested. Blümel and Ulrici state that bread made with finely divided beech sawdust answers well; they used 50 grams of the sawdust in 1½ lb. of dough. After baking, the bread contained 10 per cent. of raw fibre. They call this bread "cellulose" bread. It has been given with excellent results in about eighty cases in a sanatorium. The cost is small, the taste is pleasant, and the preparation easy. The sawdust must be cleaned and sieved before mixing it with the dough.—British Medical Journal.



## Notes on Carbograph.

**C**ARBOGRAPH is the name given by the Rotary Photographic Co. to a new pigment material for producing photographic prints. The material consists of unsensitised carbon-tissue containing a sensitive silver salt incorporated with the pigment, and gives the photographer a means of producing a carbon print either by contact or enlargement by artificial light, and without the trouble and expense of making an enlarged negative. The method was first described by Warneke in 1881 before the Photographic Society of Great Britain (now the Royal). Warneke's tissue, however, did not meet with much commercial success, notwithstanding the efforts of many leading workers to popularise it, partly because the use of gelatin as a substratum for photographic images was not so well understood as it is now, and partly, perhaps, because of some other difficulties in the development process. The carbograph process is briefly as follows: The carbon-bromide paper is exposed, the bromide image developed and cleared by immersing in a 1-per-cent. solution of glacial acetic acid. Bichromate sensitising is the next step, and this is followed by the usual rinsing, squeegeeing, stripping, and developing of the carbon process. When the picture is finished there is obtained a carbon image combined with a silver image, very much the same as in the case of ozobrome, except that in carbograph the two images are incorporated, instead of the silver image underlying the carbon, as is the case in an ozobrome print. It will be evident that the same methods of after-treatment will be applicable in both cases, with a view of modifying the result.

The silver image may be reduced or intensified, either locally or entirely, or it may be bleached right out with Farmer's reducer, so as to leave a pure carbon image.

To the average photographer familiar with bromide-printing and carbon there is no particular difficulty to be overcome. The most important point is the exposure, and it is almost useless to attempt to make a good print from an under-exposed tissue—over-exposure can be partly remedied in developing; but it is best in every case to make the exposure suit the time of development, that is, to make the development take, say, about five minutes, and to so adjust the exposure that at the end of this time a correct bromide image is produced. This adjustment is made on ordinary bromide paper, pieces of which are enclosed by the makers in each packet of tissue for this purpose. The bromide paper is of the same speed as that contained in the tissue. Having once adjusted the exposure for each negative, everything else is plain sailing. The negative must always be safe-edged in order to prevent the pigment "washing up." The following factors are used to multiply the exposure found to be correct with the bromide paper, and are necessary in order to compensate for the retarding influence of the pigment:

For Engraving black	...	...	...	...	×	9
„ Photo brow	...	...	...	...	×	10
„ Red chalk	...	...	...	...	×	10
„ Light green	...	...	...	...	×	7
„ Warm sepia	...	...	...	...	×	5
„ Cold sepia	...	...	...	...	×	8

The exposed tissue is now developed with ferrous oxalate—this being practically the only developer which has no "tanning" action on the gelatin. The makers supply a developer of iron citrate in powder-form, which, if anything, gives better results than ordinary oxalate. The ferrous-oxalate developer is made thus:

Potassium oxalate	...	...	300 grams, or $\frac{1}{2}$ oz.
Distilled water	...	...	1,000 c.c., „ 20 „
2			
Ferrous sulphate	...	...	80 grams, or $\frac{1}{2}$ oz.
Citric acid	...	...	5 „ „ 50 grains
Distilled water	...	...	250 c.c., „ 50 oz.

Immediately before use add one part of No. 2 to five parts of No. 1 (not *vice versa*), and to each ounce add 24 minims of a 10-per-cent. solution of potassium bromide.

The progress of development cannot be very clearly followed, although, when the image is fully developed, it is

quite easily seen in the denser portions. When development is complete, the print is cleared, without previous washing, in

Glacial acetic acid	...	...	10 c.c., or $\frac{1}{2}$ dr.
Water	...	...	1,000 „ „ 20 oz.

This bath is necessary in order to prevent the precipitation of basic iron salts on the film. The print, after about one minute's immersion in this bath, is washed for two or three minutes, and then transferred to the carbon "sensitiser," made as follows:

Potassium bichromate	...	40 grams., or 2 oz.
Water	...	1,000 c.c. „ 50 „
Potash alum (10% solution)	...	20 „ „ 1 „

This solution should be filtered after use, and may be used repeatedly. In this "sensitising" bath the print remains for three minutes, being gently rocked all the time, and, if necessary, stroked with a camel-hair mop to prevent or disperse air-bells. The print is then rinsed in two or three changes of water, and is brought into contact and squeegeed to the mounting paper in the orthodox carbon-process way, and left under slight pressure for about ten minutes. The next process is the development of the carbon image by immersing the print and transfer paper in water at 100° F. and stripping from one corner as soon as the gelatin begins to ooze out at the edge. The original paper is rejected, and development is carried on by laying the image on the support. If the high lights do not quite clear they may be brightened up by gently applying a tuft of cotton-wool saturated with the developing water. The print at this stage presents a milky appearance, due to the presence of unaffected silver compound. This milkiness is removed by fixing in sodium hyposulphite solution, 4 oz. to the pint. During fixation the print gains greatly in colour and becomes more brilliant. After fixing for fifteen minutes the print is washed for twenty minutes or half an hour, and is hardened in a 1-per-cent. alum-bath. Finally it is washed and dried.

Those chemists who do any quantity of carbon-enlarging will find the following alternative method of working an advantage. After developing and clearing, the print is sensitised in the bichromate-bath—which in this case should only contain half the quantity of potash alum—rinsed, fixed, and washed in the usual way, and dried. The subsequent operations of squeegeeing and developing may be carried out at any time afterwards within about a week, in the same way as ordinary carbon tissue. The process being a single transfer process, will give an image reversed as regards left and right, but this can be obviated in enlarging by the very simple means of placing the negative glass side, instead of film side, to the paper. Double transfer, which could probably be practised with carbograph, is not necessary in enlarging, as the desired result can be obtained by reversing the negative. The presence of silver in the finished print gives a means of controlling the depth and colour of the print considerably, and enables one to get a flat print from a hard negative or *vice versa*. The reduction of the silver will be found to be accompanied by a reduction in the contrast of the picture, so that by varying the amount of reduction it is possible to alter the whole tone of the print. The presence of the silver keeps the colour darker, so that here again is a means of control, and by judicious handling it will be possible to produce a picture in a higher or lower key, as may be desired. Finally, it should be observed that although fairly hard, the pigment does not appear to be able to stand as much splashing during development of the carbon image as ordinary carbon tissue, so that it is advisable to start gently and to use only that amount of force in applying the water that is necessary to produce the requisite contrast in the result.

EVERY estate in Bohemia of any importance has a distillery on it for the manufacture of spirit from either grain, potatoes, or molasses.

GRAPE-JUICE.—The exports of grape-juice from Tarragona in 1907 amounted to 1,662 cases, valued at 1,662*l*. This is quite a new export, the business having been introduced by the Grape-juice Company, and it is likely to increase. It is a non-intoxicating drink, and considering that it has only been on the market a short time, a fairly large number of cases has been shipped.



## Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with Sir C. N. Dalton, K.C.M.G., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form No. 7, cost £1, obtainable through any money-order office.

(From the "Trade-marks Journal," August 26, 1908.)

- Elephant device; for nitric, hydrochloric, and sulphuric acids for manufacturing purposes. By Richard Smith's Executors, Ltd., 182 West Street, Glasgow. 304,459.
- "ATLAS LOCUSTICIDE," and device of same; for insecticides. By the Atlas Preserving Co., Ltd., Windmill Lane Wharf, Deptford, London. 300,553.
- "FLICO"; for fly-catchers in Class 2. By the Brown Manufacturing Co., Ltd., Brook Street Mills, Bury. 304,371.
- Label device of cotton-fruit and name of association; for chemicals in Class 2. By the British Cotton-growing Association (Incorporated), 15 Cross Street, Manchester. 301,878.
- "HAWLEY'S I.K. INSECT-KILLER," and label device; for an insecticide. By Evans Sons Lescher & Webb, Ltd., 60 Bartholomew Close, London, and 50 Hanover Street, Liverpool. 303,341.
- "MADRE'S"; for an ointment for animals. By H. C. Hornby, Ashdene, Bayford, Herts. 304,487.
- "IKANDON"; for veterinary embrocations and medicines. By Cleverly Bros., Ltd., 1 Heathcote Street Stables, Gray's Inn Road, London, W.C. 304,851.
- "CAMPHONIA"; for human medicine. By J. Chambers & Co., Millstead, Eastwood, Notts. 304,341.
- "JODIVAL"; for medicinal chemicals. By Knoll & Co., 66 Oristalstrasse, Liestal, Bale Campagne, Switzerland. 304,500.
- "GLINTOS"; for a corn cure. By J. D. Harries, Medical Hall, Milford Haven, Pembrokeshire. 304,518.
- "ORSUDAN"; for medicinal chemicals. By Burroughs Wellcome & Co., Snow Hill Buildings, London, E.C. 304,528.
- "EDUCINE"; for goods in Class 3. By the Reducine Co., 38 South Frederick Street, Dublin. 304,539.
- "CONEURO"; for medicinal chemicals. By C. J. Hewlett & Son, Ltd., 35-42 Charlotte Street, London, E.C. 304,625.
- "ENDYMION"; for sleeping-powders in Class 3. By Marie Abbott, 35 The Drive, Fulham Park Gardens, London, S.W. 304,729.
- "APEX"; for goods in Class 3. By the West Park Manufacturing Co., West Park Road, Bradford. 304,785.
- "ARCTIC"; for medicinal chemicals. By T. Howard Lloyd & Co., 6½ St. James Street, Leicester. 304,830.
- "ENSYNA"; for photographic apparatus in Class 8. By Houghtons, Ltd., 88 and 89 High Holborn, London, W.C. 304,685.
- "PNEUMATOGEN"; for inhaling apparatus in Class 11. By O. N. Nachfolger, 8 Bannplatz, Vienna. 302,800.
- "ROSSONA"; for aerated waters. By W. A. Ross & Sons, Ltd., 17-19 William Street South, Belfast. 304,308.
- "SAINT WINEFRIDE," and device of same; for goods in Classes 47 and 48. By H. B. Bare, 142A Islington, Liverpool. 302,839, 302,840.
- "THE WINNER"; for goods in Classes 47 and 50. By Hodgson & Simpson, Ltd., Bebington, near Birkenhead. 303,822.
- "NATROSAL," "OXIN," and "OXIDIN"; for goods in Class 47. By Henkel & Co., Ltd., 218 and 219 Moorgate Street Chambers, London, E.C. 304,442, 303,914, 303,910.
- "PETRONELLE"; for soaps in Class 47. By B. Crowther, Junior, & Co., Valley Mills, Heckmondwike. 304,519.
- "STADIUM"; for perfumed toilet soap. By G. W. Goodwin & Son, Ivy Soap Works, Ordsall Lane, Manchester. 304,222.
- "DERMAZOIN"; for perfumery. By Manriev & Co., 42 Oxford Street, London, W. 304,915.
- "FLEXA"; for hair-brushes in Class 50. By R. Battcock, Ltd., 50 Bethnal Green Road, London, E. 303,563.

AMONG the imports into Tarragona during 1907 were the following: Sulphur 1,400 tons, caustic soda and potash 470 tons, copper sulphate 293 tons, and wax 40 tons.

BRAZILIAN MONAZITE SAND.—Over 1,700 tons of monazite sand were exported from Bahia during 1907, all of which went to Germany, as had been the case in preceding years. The following are the exports during the past five years from Bahia: 1903, 1,862 metric tons; 1904, 2,901 m.t.; 1905, 1,039 m.t.; 1906, 945 m.t.; and 1907, 1,741 m.t.

## Trade Report.

**NOTICE TO BUYERS.**—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., September 3.

THE general business tone in chemicals and drugs continues quiet without any special features. Values for the greater part are steady, and the fluctuations as noted below are mostly slight. Articles that have moved in buyers' favour include China crude camphor, benzols, antimony, and compounds, cocoa-butter, cream of tartar, chamomiles, etc. Castor and cubeb oils are dearer, and jalap is also higher. Cascara sagrada is firm but quiet. Nutmegs advanced slightly at auction, and chillies are practically unobtainable for shipment. Cassia oil is firm, but star aniseed is the turn easier for shipment. Coconut and cottonseed oils are cheaper. Shellac is extremely quiet:

Higher	Firmer	Easier	Lower
Cubeb oil	Castor oil	Aniseed oil	Antimony
Jalap	Copper sulphate (prompt)	(c.i.f.) Benzols	Cadmium salts
Nutmegs	Ergot	Cocaine	Camphor
Opium	Iron sulphate	Coconut oil	(China crude)
	Wax, veg. (Japan)	Cottonseed oil	Chamomiles
		Cream of tartar	Clove oil
		Potashes	Cocoa butter
		Quicksilver	Copaiba oil

### Cablegram.

NEW YORK, September 3.—Business in drugs is moderate. Opium is easy at \$5 per lb. for druggists'. Peppermint oil is unchanged at \$1.45 per lb. for Wayne County in tins. Quinine is lower at 15c. per oz. Spearmint oil is nominal at \$3 per lb. Hydrastis (golden seal) is steady at \$2 per lb. Western senega is lower at 35c. per lb., and cascara sagrada is firm at 9c. per lb.

ACID, ACETIC.—The demand is now fairly heavy owing to the pickling season being now on, and deliveries of contracts are brisk.

ACID, CITRIC, is almost a dead letter so far as demand is concerned: 1s 3¼d. will buy foreign, and English is nominal at 1s. 4d. Citrate of lime is quoted at 16l. 10s., at which business has been done.

ACID, TARTARIC, continues steady and fairly active at 10½d. for foreign and 10¾d. for English.

ALOES.—The s.s. *Carisbrook Castle* has brought 54 cases from Mossel Bay. Six cases of Zanzibar in skins of fair quality have arrived. Socotrine in kegs, of which there are about 15 in first-hands, are still held for 90s.

ANTIMONY.—Extremely quiet at from 16l. 10s. to 17l. per ton for Japanese crude on the spot, and for regulus 30l. to 31l. is quoted. Antimonial compounds have been reduced in accordance with the lower prices for metal. Crocus is quoted at 32s. and powder 34s., black sulphide 25s. and powder 27s. per cwt.; sulph. præcip., 10d. per lb.; antim. tart. cryst., 1s. 3d. and powder 1s. 3d. per lb.

BELLADONNA Root remains exceedingly scarce on the spot, and for shipment the high price of 65s. c.i.f. is quoted, but dealers prefer to look on.

BENZOIN.—No arrivals have taken place, but a parcel of fifty-five cases is close at hand.

BUCHU.—Fifteen bales which have arrived per *Carisbrook Castle* will probably be offered at auction next week.



**CADMIUM SALTS.**—Owing to a considerable reduction in the metal, the prices of salts have been reduced, bromide of cadmium being quoted at from 3s. 2d. to 3s. 5d. per lb. net, and the iodide at 14s. 1d. per lb., less 5 per cent. Cadmium metal is quoted 3s. 7½d. per lb. net.

**CAMPBOR (CRUDE).**—Prices from China come lower at 150s. to 155s. per cwt. c.i.f. for September-October shipment, and on the spot sellers quote 150s.

**CAMPBOR (REFINED).**—Quiet. Japanese refined in 1-oz. tablets are offered at 1s. 9½d. spot, and ¼-oz. are worth 2s. 2d. to 2s. 3d. per lb. One-oz. tablets for shipment from Hamburg are quoted 1s. 8½d. f.o.b. Slabs seem rather scarce, the last business was at 1s. 9d. c.i.f.

**CARDAMOMS.**—The exports from Ceylon continue to show a further decrease, the latest available figures showing that 362,176 lb. were exported from January 1 to August 10, being 105,601 lb. less than at the corresponding period of last year. The corresponding shipments for 1906 and 1905 were 454,297 lb. and 470,691 lb. respectively. India has absorbed 176,916 lb. and the United Kingdom 117,862 lb. this year.

**CASCARA SAGRADA.**—Firm. The price for direct shipment from the Pacific Coast or New York is still maintained at 42s. 6d. c.i.f., and on the spot small sales have been made at from 40s. to 42s. 6d. per cwt.

**CHAMOMILES.**—The new Belgian crop is now being imported in fairly large quantities, indicating buyers are covering their requirements. Prices are somewhat lower, second pickings offering at 52s. 6d. per cwt. c.i.f.

**CHILLIES.**—At auction seventy bags Japanese offered and part sold at 41s. 6d. for mixed yellowish. Fine bright were bought in at 52s. 6d. One hundred and eight bags Mombasa were withdrawn. There appears to be nothing available for shipment, and orders which have been cabled out for Zanzibar and Mombasa have remained unexecuted, owing to unremunerative prices having curtailed the production.

**CINCHONA.**—The shipments from Java during August amounted to 1,636,000 Amst. lb., against 1,620,000 Amst. lb. last year, and 1,529,000 Amst. lb. in 1906. During the first eight months of the year the shipments amounted to 10,462,000 Amst. lb., against 11,283,000 Amst. lb. last year, and 8,837,000 Amst. lb. in 1906.

**CLOVES.**—At auction six cases Penang were bought in at 11d. for fair picked. The spot market is quiet, with sales of Zanzibar at from 4½d. to 4¼d., and for arrival several hundred bales have changed hands at 4½d. c.i.f. d/w. for October-December, November-January, and January-March shipment. The delivery market has been quiet, with sales October-December at 4½d. and January-March at 4¾d.

**COCAINE** has an easier tendency, one maker now offering hydrochlor. at 6s. 10d. per oz. net. On the other hand, crude maintains its position, there being no signs of weakness.

**COCOA BUTTER.**—At auction 30 tons Cadbury's brand sold at from 1s. 1d. to 1s. 1½d. per lb. (average price 1s. 1d.), being 1½d. lower. At Amsterdam 80 tons Van Houten's sold at 78.70c., and 11 tons other brands at 70c. to 71c. per half kilo.

**COPAIBA.**—The distillers of English oil from Para balsam have reduced their price 6d. to 8s. per lb.

**COPPER SULPHATE.**—Liverpool for prompt delivery is 2s. 6d. per ton firmer at 19l. 15s., and January-April delivery is steady at 20l. 7s. 6d.

**CREAM OF TARTAR.**—Absence of demand has led to cheaper offers here and there, and recent prices can be shaded by 2s. per cwt. to 76s. for 98 per cent., and 74s. for 95 per cent.

**ELEM.**—The 20 cases recently arrived are now in the warehouse, and will probably be offered next week. They are mostly fine white quality.

**ERGOT** is in more inquiry and higher prices are anticipated; from Russia 1s. 2½d. is now quoted, Hamburg offering old crop at 1s. c.i.f. Spot stocks are almost exhausted, a little Russian could probably be had at 1s., and Spanish at 1s. 3d.; new is also quoted at 1s. 3d. c.i.f. to arrive.

**GAMBOGE.**—An arrival of twelve cases has taken place.

**GINGER.**—Quiet. At auction fifty-four barrels Jamaica offered, and a few good common realised 57s. 6d. Fifty-eight bags Cochin offered and partly sold at 34s. for small washed rough, and of eighty-four bags Japan, twenty sold at 28s. for fair limed.

**GUM ARABIC.**—Soudan sorts are steady at from 35s. to 36s. per cwt. for fair half-hard sorts, up to 55s. being quoted for fine pale sifted quality. Senegal gum (Bas de Fleuve) is also steady, sellers quoting 31s. 3d. per cwt. f.o.b. Bordeaux.

The exports of "gum" from Suez during 1907 amounted to 2,743 tons (££51,449), against 6,393 tons (££130,900) in 1906, and 4,815 tons (££117,994). The shipments were absorbed in the following order: United States 910 tons, Germany 386 tons, United Kingdom 356 tons, Belgium 298 tons, France 246 tons, Austria-Hungary 223 tons, British Possessions in the Far East 145 tons, Italy 122 tons, and Spain 54 tons.

**HYDRASTIS** is quoted at from 8s. 8d. to 8s. 9d. per lb. c.i.f., which prices might be shaded for quantity; on the spot the last business was at 8s. 8d. net.

**JALAP.**—The higher price of 11½d. per lb. c.i.f. is cabled from New York for drug passing the Customs as containing 9 per cent. resin, but not guaranteed. Good quality is quoted on the spot at 1s., and ordinary commercial quality (about 6 per cent.) at 10d.

**LYCOPodium** is firm at from 1s. 7½d. to 1s. 9d. per lb. to arrive, for treble-sifted quality.

**MACE.**—Steady; 15 packages West Indian sold in auction at 1s. 4d. for fair palish, 1s. 1d. to 1s. 2d. for reddish, and 11d. to 11½d. for broken.

**MENTHOL.**—Firm, and in more inquiry, with sellers of Kobayashi crystals at 7s. 1½d. per lb. spot.

**MORPHINE** is steady and in fairly active demand on the basis of 7s. 3d. per oz. for small lots of hydrochlor. powder.

**MUSK.**—Tonquin is slow of sale at 70s. per oz. for Pile I, fine thin blue-skin, and 50s. for Pile II. Old-fashioned is worth 45s. to 50s., and Pile III. 35s. per oz. Assam grain is easier with sellers of fair at 50s. per oz., and Russian Carbardine is worth about 19s. per oz., but is only occasionally inquired for.

**NUTMEGS.**—At auction 311 packages West Indian practically all sold with good competition at ½d. per lb. advance.

**OIL, CASTOR.**—Hull make is 5s. higher at 26l. 5s. per ton for pharmaceutical quality and at 23l. 15s. for first pressing, in barrels for prompt delivery. For September-December delivery a premium of 10s. is asked on the above prices. Cases 50s. per ton extra, delivery free, ex wharf, London.

**OIL, CLOVE.**—Best English distilled oil is lower at 3s. 2d. per lb., and less for quantity.

**OIL, COD-LIVER.**—Our Bergen correspondent writes on August 31 that the cod-liver oil market is unaltered, with very little business to report. The former quotation for finest non-congealing oil of 52s. per barrel f.o.b. Bergen is maintained. The exports from Bergen up to date amount to 12,368 barrels, against 7,972 barrels at the same date of 1907.

**OIL, CUBE.**—A further advance of 6d. has been made in English distilled oil, the price of which is now 6s. 6d. per lb.

**OIL, PEPPERMINT.** is steady but quiet for American Wayne County in tins at from 6s. 5d. to 6s. 6d. per lb. c.i.f. Japanese demethylised is firm at 4s. 9d. spot.

**OILS (FIXED).**—Ceylon *Cocunut* is easier at 27s. per cwt. spot, and Cochin is unaltered at 36s. *Linseed* closes at from 21s. 6d. to 21s. 7½d. in pipes and 22s. in barrels. *Rape* is nominal at 30s. for ordinary crude. English refined in casks is 32s., Jamba spot 30s., and Ravison spot 30s. naked. Crude *Cotton-seed* is quiet at 22s. 9d. spot; ordinary pale refined is 22s. 9d. also, and sweet refined 25s. *Lagos Palm* oil is unchanged at 27s. 6d. *Petroleum* is steady at 6d. to 6½d. for Russian, 6½d. to 6½d. for ordinary refined American, and 7½d. to 7½d. per gal. for water-white on the spot. *Turpentine* is 6d. lower on the week at 27s. per cwt.

**OPUM.**—The easier feeling has given place to one of more firmness, consequent on a good business in Smyrna on American account, where prices have advanced fully 6d. per lb. On the spot, however, there is little business doing.



Persian is reported to have been in more demand at from 12s. 9d. to 13s. for 10 per cent., and for September-November delivery 12s. 6d. is quoted. A Smyrna correspondent writes on August 22 that when the market opened holders showed an inclination to sell, and the following business was effected: Fifteen cases old Karahissar at the equivalent of 12s. 11d., one case new Yerli t.q. at 12s. 11d., and nine cases new Karahissar at 11s. 11d. c.i.f. European ports. After these sales the large holders who sold nothing tried to persuade the small dealers to sell nothing more at these quotations, assuring them that consumers whose stocks are exhausted would have to meet their demands. The market closes with this tendency—that is to say, firm, without sellers, at the above prices. The arrivals amount to 1,274 cases, against 1,050 cases last year at the same date. Another Smyrna correspondent, writing on August 28, states that the sales this week amount to 50 cases new current t.q. and 125 cases old selected material, all for the United States. Prices all round have advanced about 10 per cent., and to-day nothing can be done under 13s. 6d. to 14s. 6d. for new as to quality, and 14s. 6d. to 16s. for old. Market is very firm, and as all our richer old qualities are in strong hands, it is certain that we shall shortly again reach the high prices of last June and July. The arrivals to date amount to 1,378 cases, against 1,124 cases at same period last year.

OTTO OF ROSE is firm at 23s. 6d. per T. oz. for good brands.

PEPPER.—At auction 10 bags Ceylon offered and sold at 3½d. for good fair. Privately spot prices are unchanged at 3½d. for fair Singapore, at which business has been done; for arrival the sales include 50 tons September-October shipment at 2½d. c.i.f. d/w closing sellers. At auction 65 bags good Muntok were bought in at 6½d.; spot demand is quiet, fair Singapore offering at 5d. and fair Penang at 4½d.; to arrive moderate quantities have changed hands at 4¾d. c.i.f. d/w for September-October shipment.

PLATINUM CHLORIDE has been reduced from 17s. 1d. to 15s. 9d. per doz. 15-grain tubes. Both potassium and sodium chloroplatinate are also lower at 18s. 8d. and 15s. 5d. per doz. 15-grain tubes respectively.

QUININE remains inactive with quotations unaltered at from 7½d. to 7¾d. per oz. German sulphate from second-hands. Amsterdam is still quoted 7¼d., and Java make for shipment at 6½d. per oz. The landings in London during August amounted to 34,400 oz., and the deliveries to 125,984 oz., making the stock on August 31, 3,320,416 oz., against 3,520,208 oz. in 1907.

RHUBARB.—Flat High-dried is extremely scarce on the spot, the few cases offering being sold for 1s. 6d. per lb. The exports from Shanghai during 1907 amounted to 11,988 cwt., valued at 33,575l., against 9,833 cwt., valued at 30,396l. in 1906. An arrival of 21 cases medium to bold round Shensi has taken place.

SAFFRON.—Steady but quiet, best Valencia offering at 32s. per lb. net. During the five months ending May the exports from Spain amounted to 35,438 kilos., against 38,651 kilos. during the corresponding period of 1907 and 27,159 kilos. during 1906.

SARSAPARILLA.—Important arrivals amounting in all to forty-three bales grey Jamaica have taken place; ten of red Native and ten of Lima-Jamaica have also come to hand.

SENEGA.—Spot is quoted 1s. 10d. to 1s. 10½d. per lb., and in ton lots September-October shipment is offered at 1s. 8d. c.i.f.

SENNA.—The s.s. *Clan Graham* has brought 463 bales from Tuticorin.

SHELLAC.—Business on the spot is dull. At the opening of the week the value of T.N. was 112s. for fair free at which small sales were made, but on Wednesday the quoted value declined to 110s., practically no sales transpiring. Good and fine orange marks are also slow, values ranging from 135s. to 150s. A.C. Garnet is 110s. spot, and 110s. c.i.f. Sales of futures have been made at 111s. to 112s. for October and 115s. for March, but with a decline of 1s. in the Calcutta price of T.N. on Wednesday there were sellers of March at 112s. Sellers of T.N. for October-November shipment quote 106s. c.i.f.

SODA HYPOSULPHITE is expected to advance, owing to the paucity of stock. In first-hands there is now very little

available at the previous quotations. One of the large makers is said to have sold his output, and another has temporarily withdrawn from the market. More interest is likely to be shown in this article should improved conditions take place in the leather trade in England and on the Continent, as is not unlikely. The current quotation for large quantities is 4l. 15s. per ton f.o.b. Continent in large casks.

SODA NITRATE is unaltered at 10s. 6d. per cwt. for refined and 9s. 10½d. for ordinary, Liverpool being quoted 10s. 3d. and 10s. respectively.

SULPHUR.—There is a temporary scarcity on the spot, and prices are rather firmer at 6l. 5s. for roll and 6l. 7s. 6d. per ton for flowers; to come forward; these prices could be shaded by 5s. An advice from Messina dated August 21 states that a few days ago the Consorzio raised their prices by 1s. 3d. per ton, which makes the advance in price since the beginning of July last 3s. 6d. per ton. The stocks of all grades of refined are small, and as refiners have so far bought but little crude, it is anticipated that a further increase will take place. Stocks in Sicily amount to 558,311 short tons, against 552,462 tons, or 5,849 tons more. The following are the quotations:

Best seconds crude, unmixed, 83s., best thirds ditto 81s. 6d. per ton of 1,030 kilos. Refined blocks, in bulk, 89s.; in bags, 93s. 6d.; rolls, in bags, 97s. 6d. Flowers of sulphur, in bags of 1 cwt., 110s.; "Commercial" ditto, 97s. 6d. Ground sulphur, in bags of 1 cwt., "Commercial," 98s. 6d.; best seconds ditto, 94s. per ton of 1,015 kilos, f.o.b. Sicily.

TARAXACUM.—The new crop of foreign is now coming on to the market, but the price is not yet available.

WAX, CARNAUBA, is steady at from 90s. to 92s. 6d. per cwt. for waxy grey, at which business has been done.

WHITE LEAD.—English is quoted 16l. 5s. per ton, and for American, in which a large business is regularly passing, 16l. to 16l. 5s. per ton c.i.f. U.K. ports is quoted in large quantities.

ZINC OXIDE.—As a result of the firm position of spelter and the possibility of a close control in zinc many large buyers have contracted for their requirements as far forward as possible.

### Heavy Chemicals.

At all main centres of the heavy chemical market there seems to be a somewhat improved demand both for main and miscellaneous products, and this is both for home and export account. More attention is now being paid to the question of next year's requirements, but comparatively little has actually been done. Values all round remain on the steady side.

SULPHATE OF AMMONIA is quietly firm. There has been a fair demand, which has been well covered by available supplies. Forward business has only been of a nominal character, makers holding firm in their ideas. Present nearest figures are: Beckton, September-December, 11l. 17s. 6d. to 12l.; Beckton terms, 11l. 7s. 6d.; London, 11l. 7s. 6d.; Leith, 11l. 12s. 6d.; and January-June delivery, 12l. to 12l. 5s.; Hull, 11l. 5s. to 11l. 7s. 6d.

ALKALI PRODUCE.—A good all-round demand exists and market is steady. Bleaching-powder is in increased request and prices are very steady. Softwood casks, 4l. 5s. to 4l. 10s. per ton free on rails, and export 5l. 5s. to 5l. 10s. per ton, according to market. Caustic soda is also steadier in demand and firmer tendency in price: 76 to 77 per cent., 11l. to 11l. 2s. 6d.; 70 per cent., 10l. 5s. to 10l. 7s. 6d.; and 60 per cent., 9l. 5s. to 9l. 7s. 6d. per ton. Ammonia alkali is in good average demand, and continues to maintain a steady tone at 4l. 10s. to 4l. 15s. per ton in bags free on rails in bags. Soda crystals have continued to meet with late better inquiry, and are steady at unchanged rates—f.o.b. Tyne 57s. 6d. to 62s. 6d. per ton, f.o.b. Liverpool 50s. to 65s. per ton, saltcake unaltered at 42s. 6d. per ton, bicarbonate of soda 5l. 17s. 6d. to 6l. 2s. 6d. per ton in large casks, and 6l. 5s. to 6l. 15s. per ton in 1-cwt. kegs f.o.b. Liverpool. Chlorates of potash and soda, although somewhat quiet, are steadily maintained at 3½d. to 3¾d. per lb., in accordance with quantity, etc. Yellow prussiates of potash and soda are rather quiet. Potash 4½d. to 5d., and soda 3½d. to 3¾d. Hyposulphite of soda is a fair all-round business at steady values, varying from 5l. to 5l. 10s. per ton for ordinary crystals in large casks. In 1-cwt. kegs prices vary from 5l. 15s. to 8l. per ton, in accordance with quality and quantity. Silicates of soda maintain a steady tone—140° Tw. 4l. 2s. 6d. to 4l. 12s. 6d., 100° Tw. 3l. 12s. 6d. to 4l. 2s. 6d., and 75° Tw. 3l. 5s. to 3l. 15s. per ton, according to quality, quantity, and destination.



**Manchester Chemical-market.***Manchester, September 1.*

There is a fairly steady feeling in most departments. Green copperas is about 2s. 6d. per ton higher, and local makers are receiving good inquiries. Copper sulphate is 5s. to 10s. per ton lower, but there is no pressure to sell. Sulphur in better inquiry and in sellers' favour. Arsenic and brown acetate of lime dull. Benzols and crude carboic acid lower. Heavy chemicals steady. Drysalteries dull. Farinas steady, but sizing flour tending upwards. Fixed oils in buyers' favour, except perhaps petroleum. Ammonia muriate, 24l. per ton; sulphate of ammonia on rails Manchester, 11l. 7s. 6d. to 11l. 8s. 9d. Acids: arsenic, sp. gr. 2,000°, 26s. 6d.; glacial acetic, 35s. to 37s. 6d. per cwt.; sulphuric (free from arsenic), 145°, 36s. per ton. Aniline oil, 5½d.; salts, 5d. per lb. Barium chloride, refined crystals, 7l. 10s. per ton; barytes, refined white, 32s. 6d. to 35s.; grey, 35s. to 37s. 6d. per ton. Benzols, 50's. 6½d. to 6¾d.; 90's. 6¾d. per gallon; carboic acid, 39° to 40° C., crystals, 4¾d.; 34° to 35° C., 4½d.; crude 60's, 1s. 4d. to 1s. 4½d., east coast; 1s. 3½d. to 1s. 3¾d. west coast. Carbide of calcium (for acetylene gas manufacture), 12l. to 14l. 10s. per ton; sulphate of iron (green copperas), 45s. to 47s. 6d. f.o.b. Manchester Ship Canal. Bleaching-powder, 4l. 5s. to 4l. 10s. per ton; softwood casks, on rails at works. Glycerin (chemically pure in tins and cases), 65l. to 66l.; 5-cwt. drums, 61l. per ton. Foreign white sugar of lead, 23l. 10s.; grey, 20l. 10s. to 21l.; nitrate, 24l.; acetate, 23l. per ton. Methylated spirit (61 o.p.), 1s. 8d. per gal. Naphthalene, 4l. 10s. to 8l. 10s.; salts, 30s. to 35s. per ton. Manganese, 94 per cent., 30l. to 32l.; 80 to 85 per cent., 7l.; 70 per cent., 6l. 15s.; 60 per cent., 5l. 15s. per ton. Potash: Carbonate, 90 per cent., 17l. 10s.; caustic, 87 to 90 per cent., 23l. 5s. per ton; chlorate, 3½d. per lb. Glauber salts, 42s. 6d. f.o.r. Sulphate of magnesia (Epsom salts), 60s. per ton in bags, and 70s. to 85s. per ton casks and barrels for export, according to quality; cyanide of potassium, 8¾d. per lb. Verdigris (English), 9d. per lb. White powdered arsenic, 16l. 10s. to 17l. per ton. Sulphate of copper, 22l. 10s. per ton, best brands, delivered Manchester. Sub-oxide of copper (commercial powder), black, 10¾d.; red, 11d. per lb.

**American Drug-market.***New York, August 25.*

The New York market continues seasonably quiet. Prospects for a substantially increased fall trade, however, are considered good, and this feeling is exemplified by improved inquiries for forward supplies. Prices generally are well maintained. Opium is again lower. Cascara is dearer on spot.

ALOES.—Curaçao in boxes is moderately active, with values steady at 6½c. to 7c. for jobbing supplies. A fair business has been done in Cape at 8c.

CASCARA SAGRADA.—As in former years, trustworthy information regarding the progress of the bark harvest is almost impossible to obtain. The season's famine reports are, however, well supported by a dearth of offerings, and prices named recently—viz., 6½c. to 7c. for car lots c.i.f. New York—are reflected in the spot advance to 8½c. to 9c. per lb.

COPAIBA.—The better grades of C. & S. American pure have been in fair demand, partly for foreign account, and prices are steady at 45c. to 55c. Para is worth 70c. to 80c.

GUARANA is in more plentiful supply, and \$3.50 is now quoted, a decline of 25c.

HYDRASTIS continues in advancing tendency with the demand for manufacturing lots particularly brisk. Fall-dug is not obtainable under \$2, and up to \$2.10 is asked by some of the principal holders. Spring-dug also is active and firm at \$1.90, and since this term applies to drug collected during early and late summer, the more maturer specimens are well up to the full standard, warranting a price approximating that of the later crop.

MANDRAKE.—Advices from primary sources are to the effect that the yield so far has been poor. Spot prices are 7c. to 9c., but owing to the shortage in all markets a higher range is expected to rule.

ORFUM.—The market is very quiet, and only small parcels change hands in view of the course of prices. Declines during the week totalled 15c., leaving \$5.25 per lb. as a rather unsteady basis.

PEPPERMINT OIL (AMERICAN).—The spot position continues steady, with prices for "tin" oil ranging from \$1.45 to \$1.60 as formerly. Reports from the distilling areas indicate a satisfactory yield of oil, and, judging from several recent consignments of new oil, the quality is first-rate. Prices may be expected to rule fairly steady during the progress of the harvest. Cheaper offers from primary sources are not regarded as applying to U.S.P. grades, one 2,000-lb. lot for sale at \$1.30 being found exceptionally low in ester content, though not wilfully adulterated.

SENEGA is easy, and 38c. per lb. will buy Western.

**Alpes Maritimes Crops.***Grasse, August 25.*

ALMOND AND APRICOT KERNEL OILS.—Grasse is renowned not only for its supply of raw materials for perfumery, but also for the manufacture of almond oil and peach-kernel oils. Owing to its proximity to Marseilles, with its large shipments of almonds, these oils and essences can be manufactured at extremely low prices. Just now the price of raw materials is at its lowest level, and the moment is propitious for buying and laying in stock. There seems no probability of a decline in price in the near future, and when the autumn season sets in and business becomes brisker it is probable that an upward tendency will become apparent.

JASMINE.—The crop is almost over, but the arrivals, as had been anticipated, are not very considerable. Quotations for the products of this flower will remain unchanged.

OLIVE OIL.—In consequence of the recent application of the law against adulteration of olive oil, it is probable that there will be a considerable increase in the quantity of olive oil exported from France. The consensus of opinion is that the prices which have obtained until now will vary considerably in the future. The actual stocks are low, and holders are not anxious to dispose of them just at present, as they hope to obtain higher prices later. The last crop was poor, and the demand has almost doubled, so a rise seems inevitable. Unfortunately the superiority of the olive oil manufactured at Grasse does not seem to be sufficiently recognised by buyers.

SPIKE AND ROSEMARY.—Actual quotations are exceptionally favourable—a circumstance due to the small demand during the last few months. In this connection it is well to point out to buyers that the spike and rosemary oils obtained in the neighbourhood of Grasse are unanimously declared to be superior to those produced in Central France (Vaucluse, Drôme, Gard). This is due to the climate.

TUBEROSES.—As already indicated, the crop is none too good, and flowers have been dear.

**Continental Drug and Chemical Markets.**

ACETANILIDE.—Although the value remains unaltered, there has been a considerable weakening in the demand, owing to the decline in German exports, induced by the unfavourable condition of trade in various countries. A change can only be expected if the general situation improves.

AMMON. CARB.—The firmness induced by the steadiness in the English market is still maintained. The demand has increased, and as it must be covered within the next few months, it is not improbable that prices may be advanced still further.

BISMUTH SALTS.—The market has been very firm for some time, although offers at lower prices crop up here and there. These, however, only apply to limited quantities, and scarcely affect the general position. The high quotation for the metal seems to increase the firmness of the market for preparations.

CAFFEINE.—This product is controlled by a convention, but of late lower offers have been apparent in one of the principal trade centres. Although these are inconsiderable the market is affected, and consumers are maintaining a cautious attitude.

CAMPHOR (REFINED).—The upward movement which became apparent during the last few weeks has been succeeded by a decline, the consumption having been insufficient. The decreased demand promptly induced lower offers from second-hands.

CITRIC ACID.—The change in the basis of raw material has as yet had no effect on citric acid, and at present it is impossible to say whether it may influence the market later on. At any rate, the makers are more inclined to make concessions; the demand has become somewhat slack, and it is possible to obtain lead-free crystals at 270m. to 275m. in quantity.

ERGOT.—There has been more demand for Russian, which is quoted at 2.10m. ex warehouse. Offers from the producing centres of Spanish or Portuguese ergot for shipment have been somewhat more frequent, and quotations are at 2.25m. per kilo., c.i.f. terms.

GLYCERIN.—The rise of 10m. per 100 kilos., which occurred about the middle of August, resulted in a brisk demand, which applied more particularly to second-hands, who still control cheap supplies. These conditions still continue, and the official quotations of 122m. to 126m. per 100 kilos. for Ph. G. IV. quality is nominal.

LYCOPodium.—The result of the crop in Russia is awaited with considerable anxiety this year. The old supplies are limited; only small quantities are being sold now, and these already realise the higher price of about 340m. per 100 kilos. It remains to be seen whether the Russian reports regarding a small crop are really justified.

MANNITE.—For some considerable time prices have been fixed by a syndicate, which, contrary to expectation, did not adopt the lower prices which became apparent. Now no change can be thought of until the new manna crop is in. A good deal of material, bought below present quotations, is held in second-hands.



**QUILLAYA.**—Although the market in Chile is said to be firm, with few offers, the Hamburg market remains quiet, with no great amount of business, on a basis of 56m. first cost.

**SALMIAC.**—The position of this product, both as regards industrial and chemically pure, is very unfavourable in Germany. The production exceeds the consumption, which has decreased considerably, and at present there seems no prospect of improvement.

#### Java Quinine Auction.

At the auction of quinine held at Java on September 2, 4,299 kilos, Ed. II. were offered, of which 2,612 kilos. were sold at an average price of 10.50fl. per kilo. (3 cents Amst. unit), against 10.70fl. (3c. Amst. unit) at the previous auction.

#### The Shellac Failure.

In the United States Circuit Court on August 26, before Judge Holt, Mr. F. B. Kirkbride and Mr. Runyon Pyatt were appointed receivers of the business of Rogers & Pyatt, dealers and manufacturers of shellac at 129 Front Street, New York. The receivers were named following an action in equity brought by Ralli Bros., of London, and Henry S. Chatfield, of Elizabeth, N.J. Ralli Bros. have claims amounting to \$206,888 for material furnished, and Chatfield owns stock worth \$50,000. In addition to asking for the appointment of Receiver, the plaintiffs required that the business be wound up and its assets divided between the creditors and stockholders. If this be done, they say, the assets would cover existing liabilities. The company, among other things, say the conditions of the market in the United States for shellac and similar materials are depressed and abnormal. In consequence the defendant company has been unable to collect a considerable part of the debts due to it, and has been unable to procure banking credits which it ordinarily uses in carrying on the business, and it has now become, and is, insolvent and unable to pay its creditors in full. The amount of the liabilities and assets are not given in the papers filed in the court. The assets are large. The business was started in 1881 by the firm of Rogers & Pyatt and was incorporated in 1902 with a capital stock of \$150,000. Mr. Rogers died several years ago. Mr. Runyon Pyatt is President and Mr. Henry S. Chatfield is secretary and treasurer.

#### Bromine Production in U.S.A.

The report of the United States Geological Survey for 1907 shows that the production of bromine continues to increase, the figures being as follows:

	lb.	\$
1903	598,500	167,580
1904	897,100	269,130
1905	1,192,758	178,914
1906	1,283,250	165,204
1907	1,379,496	195,281

In the United States the bromine industry is centred in Michigan, Ohio, Pennsylvania, and West Virginia, the total value of the production last year being \$195,281, the average price per lb. working out at rather over 14c. The average value was therefore somewhat better than in 1906, as in that year there was an increase in production of 90,492 lb., but the value fell by \$13,710, the average price working out at only 12.8c. per lb.; the value per lb. in 1907 was still below that for 1905—namely, 15c. Prices were extremely low last year, and in some cases barely equal to the cost of production. These low prices are in large measure due (the report states) to the heavy importation of German bromides. Michigan furnished the greater part of the bromine output in 1907. The brines in that State containing bromine in commercial quantities come from the Marshall sandstone in the "Upper" Carboniferous, and contain from 0.1 per cent. to 0.3 per cent. of bromine. At Midland and Mount Pleasant, where large quantities of bromine and bromide are made, special patented processes are used. The bromine is freed from its usual combination of alkaline bases by electrolysis. The free bromine is then blown out of the solution by air and absorbed by caustic soda.

#### German Spirit.

According to the "Spiritus und Spirituosen Rundschau," an interesting quarrel is about to revolve around the disposal of the stock of spirit held by the "Centrale" for the exploitation of spirit, which is to be dissolved on September 30 in consequence of the withdrawal of a number of the members. A new company has been formed under the title "Spiritus-Centrale," which will continue to do business in spirit, and which will come into force on October 1. The very considerable stock of spirit which will be on hand at the end of September constitutes the chief object of the liquidation of the former company. This is estimated at some 600,000 hect., of which the cost price (Einstandpreis) is 48m. per hect. To this may be added the anticipated "after-payment" of about 3m., so that the stocks ought to represent a value of about 30 mil. m. The original idea was to transfer these supplies to the new company, and if the full value had been obtained

in this transaction there would have been no objection since the members who are withdrawing would have obtained what they were entitled to. It now appears, however, that the stocks on being transferred to the new company would not be valued according to the basis of the cost price, but according to an estimated valuation, which would also include this year's crop and that of the coming campaign. This valuation is said to be about 10m. lower than the cost price (48m.), so that the value of the stocks would fall from some 30 mil. m. to about 24 mil. m. The new company would, therefore, have the advantage of starting with a large quantity of relatively cheaper raw material, and if prices for the coming campaign are on a similar level to present quotations the company possessed of these cheap supplies could do considerable damage to the outstanding factories. This is fully recognised by the members who are withdrawing, and these members demand, under the leadership of the Nurnberger Spritfabrik, that on the liquidation of the company the stocks in hand shall be put up for sale publicly. As it was feared that in this case the stocks would be offered in such large quantities as to render it impossible for individual firms to buy, the Nurnberger Spritfabrik has already secured a number of firms, which have agreed to buy in common under the aegis of the above-mentioned firm. The Nurnberger Spritfabrik is now sending round a detailed circular explaining the situation and declaring itself prepared to warehouse stock, and even to rectify it. There are already about twenty important firms who have seceded from the "Centrale."

#### London Drug Statistics.

THE following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses for the month of August 1908, and to the stocks on August 31.

	August		Stocks		1908	
	Landed	Delivd	1908	1907	Imprtd.	Delivd.
Aloes.....cs, etc.	227	125	464	443	1,352	1,152
.....gourds	—	—	1,371	584	472	652
Aniseed, star.....cs.	—	—	124	—	135	11
Arrowroot.....pkgs.	1,154	672	9,754	6,625	11,098	7,166
Balsams ... cks, etc.	51	74	429	574	491	572
Calumba.....bgs.	—	5	182	574	22	459
Camphor.....pkgs.	780	1,011	979	3,040	5,438	7,223
Cardamoms.....	31	249	1,577	2,478	2,419	2,598
Cinchona.....	284	531	4,352	5,443	3,246	3,865
Cocculus indicus.....	—	12	5	75	—	12
Cochineal.....	47	52	62	340	339	283
Cubeb.....bgs.	—	10	155	435	—	38
Dragon's blood.....cs.	35	6	125	60	213	154
Galls.....pkgs.	33	306	1,569	2,481	1,563	2,040
Gums—						
Ammoniacum ..	—	—	4	18	—	7
Animi.....	114	32	313	213	776	637
Arabic.....	175	289	6,501	9,228	6,010	6,297
Asafetida.....	—	37	325	344	415	439
Benzoin.....	45	88	382	1,208	724	1,045
Copal.....	6,104	3,000	21,332	16,699	31,360	17,569
Damar.....	892	459	2,252	2,377	3,985	4,199
Galbanum.....	—	—	—	—	—	—
Gamboge.....	14	6	91	32	104	88
Guaiacum.....	16	6	89	51	85	38
Kauri ... tons net	67	77	495	816	737	831
Kino.....pkgs.	—	2	117	66	73	14
Mastic.....	3	3	8	18	20	11
Myrrh, E.I.....	103	41	434	225	486	303
Olibanum.....	250	43	1,978	1,542	1,699	709
Sandarac.....	79	56	462	393	1,028	868
Tragacanth.....	252	1,142	5,012	3,901	8,397	8,570
Ipecacuanha—						
Cartagena.....	3	5	35	59	27	56
E.I. ("Johore").....	27	8	45	11	88	93
Matto Grosso.....	26	19	74	118	118	116
Minas.....	—	2	65	79	62	71
Jalap.....bls.	—	2	17	17	64	59
Nux vomica.....pkgs.	265	—	568	22	1,424	580
Oils—						
*Aniseed, star.....cs.	10	—	38	26	50	33
*Cassia.....	—	13	87	41	128	63
Castor.....pkgs.	25	49	267	241	858	891
Coconut.....tons	438	2 3	1,443	265	2,354	1,359
Olive.....pkgs.	1,679	2,100	2,482	2,695	6,297	5,226
Palm.....tons	—	9	8	15	22	25
Quinine.....lb.	2,150	7,674	207,526	220,013	18,304	31,498
Rhubarb.....	52	23	424	324	299	448
Sarsaparilla.....bls.	38	68	228	166	760	736
Senna.....pkgs.	488	574	618	54	2,170	2,410
Shellac.....cs.	6,811	2,245	39,111	19,136	43,695	29,501
Turmeric.....tons	—	22	261	353	107	180
Wax—						
Bees'.....pkgs.	1,035	258	2,698	1,678	3,744	3,010
Vegetable.....	—	1	92	128	210	406

\* Stocks of essential oils at Smith's Wharf and Brewer's Quay are not included.



## American Notes.

(From the "C. & D." Correspondent.)

**DURING THE HOT MONTHS** of July and August the druggists of several towns in the State of Pennsylvania have shut their stores regularly during one afternoon every week. Thus easy is voluntary closing.

**APPROACHING MEETINGS.**—The annual meetings of the American Pharmaceutical Association and the National Association of Retail Druggists will be held this month. Both societies are considering more or less radical plans for reorganisation, the A.P.A. in order to enlarge its horizon somewhat, and the N.A.R.D. to reduce its large machinery and expenses.

**CAMPHOR DUTY.**—After prolonged litigation the Treasury Department of the Government has decided to drop its contention for the imposition of a high duty on synthetic camphor, and the commodity will hereafter be admitted free on the technicality that it is a "crude" and not a "refined" camphor. This claim has been upheld by the Board of Appraisers, the Circuit Court, and the Federal Appellate Court.

**AMERICAN "BOOTS."**—The William B. Riker & Son Co. aspires to do in the United States what Boots have done in Great Britain. It conducts nine pharmacies in Greater New York and seven in Boston. Last month the two large Boston stores of Lewis & Co. were taken over by the Riker people at a big figure. The Riker stores as a whole are much larger than the average "Boots" shops, so that the total business of the sixteen stores is probably equal to that done in fifty or sixty of the Boots establishments. The Riker concern is the largest "company pharmacy" so far established in the United States, although there are several other corporations crowding it very closely.

**BAY-RUM.**—The Government has "jockeyed" with the tax on importations of bay-rum from Porto Rica until distributors have been very seriously embarrassed. Three or four months ago the tariff was removed from the product, which resulted in much trade activity in the substance. Then the Internal Revenue Department stepped in, declared that bay-rum is really an alcohol, and that it should pay an excess tax as such in view of the fact that large quantities of it are used as a beverage. A revenue tax of \$1.10 per gal. was therefore imposed. Wholesalers and jobbers who had made large contracts for future deliveries protested so earnestly against the action of the Government that the Treasury Department ordered the tax to be suspended for a limited time.

**A STARTLING ADDRESS** was recently delivered before the Ohio Pharmaceutical Association by Professor James H. Beal, well known as one of the leading pharmacists of America, and serving during the last year as Drug Inspector of the State of Ohio. Professor Beal declared that among his other duties he had taken occasion to examine some of the drugs kept and used by dispensing physicians, and that he had found the conditions to be far from what they ought to be. He said that "though there are many honourable exceptions, the pharmaceuticals to be found in the offices of dispensing physicians are very frequently of the cheapest and poorest description, and if dispensed or sold by a druggist would subject him to prosecution under the food and drug laws." The Professor sees no reason why physicians should not be made subject to the laws, and he asserted that the substances used by many of them were a menace to public health.

**MESSRS. ENRICO GANNI & Co.**, of Leghorn, exporters of Italian produce, have published an illustrated reprint from the review "L' Italia" giving an account of the rise and progress of their house.

**CITRATE AND JUICE EXPORTS.**—The total exports of citrate of lime from Messina during 1907 amounted to 4,737 tons, as compared with 4,349 tons in 1906, 3,043 tons in 1905, 3,649 tons in 1904, and 2,246 tons in 1903. Of the total exportation in 1907, 1,628 tons was sent to France, 1,485 tons to the United States, and 771 tons to the United Kingdom. More than half the total exportation of concentrated lemon-juice from Messina was sent to the United Kingdom—viz., 575 tons out of a total of 984 tons. In 1906, 888 tons was exported, 1,107 tons in 1905, 2,059 tons in 1904, and 1,419 tons in 1903.



**TO CORRESPONDENTS.**—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. Publication of letters does not imply our agreement with the arguments or approval of the statements therein. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects presumably of interest to our readers generally. Letters received after the early posts on Wednesday cannot as a rule be dealt with in the current week's issue.

**BUSINESS INFORMATION.**—We have very full records of the makers or agents for articles and products connected with the chemical and drug trades, and supply information respecting them, by post to inquirers. Inquiries regarding any articles which cannot be traced in this manner are inserted under "Information Wanted."

### The Mischief of Delusive Argument.

**SIR,**—Many odd sayings as to the Act of 1868 and about chemists and druggists have been put forward even by themselves well suited to serve the purposes of partisanship, but application of that term to a suggestion that the mischief prevailing for thirty years past is mainly the result of a mistaken view of the Act, and of judicial misconception as to its intention and meaning, seems more like a case of wrong labelling than anything else. The suggestion does not offer material for partisanship even to those specially privileged in that domain; it rests upon accessible data that are either self-evident in themselves or have become so in the course of time. Nor does the implied misleading effect of delusive argument express any sort of disrespect to learned judges, but merely possible fallibility, and even judges have occasionally given startling illustration that great legal learning may be associated with equally profound simplicity. But consideration of the matter in that sense and of such questions as it raises cannot well be longer neglected or avoided. Company trading is here to stay. Since 1880 it has been enabled by judicial countenance to take a position directly opposite to the intention of the Act regulating the sale of poison. It has thus to a great extent defeated the object of the Act; by the same means it has seized one end of the lawful chemist and druggist's personal right. It now claims that such possession necessarily gives it as much right to the other end as the lawful possessor can have. The only means of preventing further acceptance of an adroitly disguised presentation of that new gospel of the rights of property is to strip off the mask concealing its real nature.

Leaving aside inconsistencies in the leading case decision, by which the legal bearing of distinction between a company and an individual may be supposed to have been defined, or muddled, as perception may require, the argument thus used and in effect judicially accepted as applicable to the case—viz., that the public object of the Act was to be defeated and its clear language ignored, because of their essential incompatibility with distinction between a company and an individual, that was maintainably valid for other and different purposes—is, undisguised, quite as absurd now as it ever was; it rests upon false analogies, false assumptions, and other fallacies, but is the rock-bottom of the leading case decision of 1880. Its delusive plausibility has, however, evaporated, and it has passed from the domain of partisanship just because it has been found vacuous and no longer of any weight for that purpose. Whatever acceptance has been given to it, or to the position then established by means of it, has been given out of customary loyal respect for judicial authority and legal precedent; that may have even gone to the extent of its being accepted as obvious truth by some, just as continued familiarity with illusion may do. That result has also been unfairly promoted to the disadvantage of the lawful chemist and druggist by dexterous manipulation of such phrases as freedom of trade, monopoly, trade protection, etc. In that way the domain of partisanship has been occupied by Mr.



Jesse Boot, who holds the field by his representation that the matter is merely an instance of struggle for existence between "trade rivals" in order to obtain possession of "an invaluable trade asset"—viz., the right to use the description "chemist and druggist."

In that position of the matter interest still attaches to the absurd but delusive argument which misled judges to confer on companies immunity that has been the cause of mischief and injury; for though that argument has passed into the region of history, the no less absurd consequences of the judicial misconception it produced still remain to thwart the intention and whole object of the Act. Considering the matter, therefore, in the sense of your editorial of July 11, the position supposed to have been established in 1880 and also to have been accepted as incontrovertible does not really appear in that light—to wit, in the remarkable case decided by Baron Pollock and Mr. Justice Hawkins in 1890, the difficulty they encountered in construing the Act and applying its provisions arose directly from the perversion of its intention and meaning had undergone by the 1880 ruling. Counsel in that case contended, in direct opposition to that ruling, that the real intention of the Act was to prevent the business of chemist and druggist being carried on by anyone unqualified, but that an unqualified assistant was not liable to penalty for selling poison. That called forth from the Bench the cogent protest: Then if nobody is hit, what is the good of Section 15? The same learned counsel had previously, in the leading case, successfully urged that "person" in the Act could not be held to mean, or have been intended to mean, a company, because nothing in the object of the Act or in the context requires such a construction! Hence the position supposed to have been accepted as incontrovertible was evidently not found so even in 1890. The difficulty created by the 1880 ruling as to "seller" was also shown in the judgment and by the necessary severe twist given to the meaning and language of the Act, in order to prevent its whole object being "frittered away" by ingenious forensic dialectics.

Again, the opinion of Lord Halsbury is that the position of companies is "anomalous" and a mistake that ought to be remedied. More recently Lord Haversham recalled Lord Blackburn's warning as to the danger to the whole safety of the public. The scattered rays of light emerging from a highly refracting medium and touching the really crucial point of former misconception of the Act, show that useful instruction to be obtained from the region of history would fortify the valuable assistance rendered by Sir J. Batty Tuke, Mr. Stanger, Sir George Fardell, and Mr. Snowden. Other members of Parliament might then be expected to understand the case and to perceive the violation of personal rights inseparably bound up with protection from the public danger which they deprecate. The surest mode of attaining peace and quiet as well as safety and justice is to clear away the dense fog of irrelevancy and error obscuring the point at issue, which is not whether the modest personality of the lawful chemist and druggist could or could not have been stretched to include the more imposing magnitude of a limited company or a co-operative store, but whether realisation of the public object of a useful Act is not essentially dependent upon maintenance of the provisions giving statutory position to chemists and druggists—viz., the status of the lawful trader alone entitled to conduct the business within the plain meaning that the hitherto mutilated Act is at length being found to possess.

PHAR. CHEM. (36/14.)

#### The Stability of Alkaloidal Extracts.

SIR,—In your issue of July 25, p. 72, appeared an article on this subject by M. H. Webster, pharmaceutical chemist. The article is a very interesting one, but it would appear to be misleading, as it is not stated what condition the packages of these "old" extracts were in when received. Had the seals been broken and the corks removed? Had any of the extract been used and an air-space left? Were there any deposits or precipitates noted in the samples? These are all pertinent questions which should have been fully answered in the body of the article.

It is the experience of your correspondent that in the various tinctures and extracts upon the shelves of the dispensing chemist the variation in the contents of the dispensing bottles alters materially from year to year, the

liquid contents becoming weaker in menstruum strength with a corresponding deposit or precipitate of the solids, which, if administered with the old direction "to be well shaken before taking," might lead to disastrous results. There is at least one pharmacist in the United States who, thoroughly appreciating these facts, will not permit any liquid preparation that is two years old to be dispensed from his pharmacy.

It might be appropriately added that the active principles of the drugs named in Mr. Webster's article are and have been on the market for some years past, and the majority of progressive, thinking physicians are using them, being certain that in these they have a constant and dependable means of combating disease, and aconitine, atropine, colchicine, cicutine, hyoscyamine, hyosine, emetine, strychnine, brucine, physostigmine, and daturine have largely replaced the fluid preparations quoted.

Yours very truly,

W. T. THACKERAY, A.M., M.D.,  
Pharmaceutical Chemist.

Chicago, Ill., U.S.A., August 19.

#### The Dutiable and Non-dutiable.

SIR,—Kindly permit me to direct the attention of your readers to the following: The "Kaputine" Co., Ltd., have for a considerable time had on the market a dutiable head-ache-powder under their trade name. Their methods of business have been fair, the profits good, and their advertising extensive. In consequence, the powders have a large sale—particularly in the North of England, where the good will of the chemists has not been withheld. The proprietors have recently brought out a similar (if not identical) powder, under a non-dutiable title, but bearing the "Kaputine" name in bold characters, which is being supplied to dealers (small grocers and the like) who have not a patent-medicine licence. A sample powder is enclosed herewith. This was asked for by, and supplied (without comment) to, a messenger as a "Kaputine" powder.

I am, Sir, yours faithfully,

W. ARTHUR SENIOR

(Hon. Secretary Scarborough Chemists' Association).

Scarborough, August 31.

[The specimen enclosed is labelled "Head Powder, prepared by the Kaputine Co., Ltd., Lindley, Huddersfield." The word "Kaputine" being in larger letters than the other words, and in red ink, so that it stands out amid the others in blue. While highly placed members in the ranks of pharmacists push trade in medicines among grocers and small shopkeepers, the conditions which are at the back of the above complaint are in the region of extenuating circumstances; but another question arises—namely, to what extent under the Medicine-stamp Acts may the name of a proprietary medicine be applied to an article made and kept ready for sale as a non-dutiable medicine? We understand that the question has been considered by the Revenue authorities, and the conclusion appears to have been arrived at that in such cases as the above the article sold is not the dutiable medicine, and that proprietary rights are not claimed by the use of a trading name associated with the proprietary article. There is, however, sufficient doubt about the matter to lead to the consideration whether the circumstances narrated by Mr. Senior constitute "uttering."—EDITOR.]

#### Ailments and Affections.

SIR,—I am a regular reader of your most interesting columns, and was particularly interested in the discussion you referred to under the above heading. The claim set up by the Inland Revenue authorities was that the words "for delicate children and invalids it is invaluable" converted it into a medicine, though after an exchange of views, in which it was still maintained that these words were on the borderland, they were allowed to pass. What specially fascinates one is to try and discover on what principle the authorities act. Why, for instance, does Rubwel ointment escape? Surely the claims made for it on the label and in the advertising matter go very near to offering it as a remedy, and I will make bold to say that the ordinary everyday person will class Rubwel with various patent medicines for the skin which are compelled to pay duty. Why then does Rubwel escape? If you can supply the answer it will, I am sure, interest others besides myself, because at present I must subscribe myself

PUZZLED. (34/63.)

[The Board of Inland Revenue have from time to time declared that certain affections are not human ailments in



the sense of the Medicine-stamp Acts. A complete list of these is given on p. 435 of the *C. & D. Diary*, 1908, and there is nothing in the Rubwel literature or labels which cannot be found there. "Puzzled" would not be so if he were as familiar with the law as the manufacturers of Rubwel seem to be.—EDITOR.]

#### Decimal Dispensing.

SIR,—I have read your remarks (*C. & D.*, August 22) on the efforts being made by the Decimal Association to influence the medical profession in favour of adopting the metric system of weights and measures in writing prescriptions, and as a medical practitioner desire to submit some considerations. Anyone who looks into the matter can appreciate the advantages of the metric system; but there are few whose penetration enables them to discern its disadvantages. The weakness of the metric system, as well as its strength, lies in the fact that it is a decimal system. It is very convenient for calculating by tens and tenths; it is quite unsuitable for processes involving dozens or eighths, and still more so in the cases of thirds and sixths. Now nearly all the calculations in dispensing involve multiplying or dividing quantities by four, six, eight, or twelve. It is practically never desirable to send out five or ten doses at a time. By using the metric system it would become quite easy to dispense by fives and tens—a thing we never wish to do; while all the usual processes of dispensing would involve us in two places of decimals. Our existing systems of weights and measures are by no means perfect, but those which concern the dispenser are certainly convenient. They admit of the division of quantities with exactness into three, four, six, eight, twelve, or sixteen equal parts, as well as providing for the quite unusual instances which require division of quantities into five or ten equal parts. The metric system facilitates the latter unusual operations and complicates all the former usual ones. What is really desirable is such a modification of our present systems of coinage, weights, and measures as would conserve the advantages afforded by the dozen in being capable of exact subdivision, while conferring the additional benefit of a systematic correlation between the units of weight and measure and value. By imposing the decimal system upon our science, arts, and commerce we should gain the latter benefit, while we forfeited the former real advantage. Trusting that you will see your way to afford publicity to this aspect of the matter,

I remain, yours truly,

Vox. (36/56.)

#### Ingoldsby Legends and Pharmacy.

Upon examining some old family papers (writes *S. E.*, 24/90) I recently discovered a time-worn document dated A.D. 1634, which read as follows:

By these presents Thomas Ingoldsby, son of John Ingoldsby, gent., is bound apprentice to Henry Blackstone, chirurgeon and apothecary of the City of London.

This member of our family subsequently rendered great service during the great plague of London, as may be seen in his Latin epitaph which records his many virtues in Cripplegate Church, commencing "Hic jacet."

Come, gentle Thomas, list to me,  
And I will teach you pharmacie,  
To make your pills and boluses  
With "aloes, barb., and molasses."  
Also how to spread a plaster  
Such as will delight your master.  
Good advice I too could give:  
If in honour you would live,  
Spend your days in earnest look-  
ing for the truth in Nature's book;  
Tend to business morn and eve,  
And all doubtful practice leave.  
Be not like the arrant cutter,  
Dragging science through the gutter;  
"He may be a highly respectable man,  
But I can't say much for his taste."

#### Limited Price Protection.

SIR,—There is a matter which I desire to ventilate in the *C. & D.* There is another "patent" being advertised which is recommended to be made up into a mixture, formula given. This "patent" is advertised as P.A.T.A. price-protected. This is quite a blind. The price of the mixture which customers come for is not protected, and sooner or later is cut to nothing. Liquid barkola compound

was one of these. I wrote to the firm and pointed the matter out, asking them to protect the price of the mixture; they replied that the understood selling-price was —, and that so-and-so (store) sold it at this figure and that they thought it would be right. Before long the inevitable happened, the mixture was cut to about the selling-price of the "barkola" itself. I wrote to the firm, but they did not reply. Cannot chemists combine and refuse to have anything to do with these articles?

Yours sincerely,  
DISPENSING CHEMIST. (33/67.)

#### Dispensing Notes.

##### A Benzol Inhalation.

SIR,—Will you be good enough to state how the following should be dispensed?

Benzol.	...	...	...	5j.
Ol. cassiæ	...	...	...	℥℥℥.
Magnes. carb.	...	...	...	5ss.
Aquam ad	...	...	...	3j.

Fiat inhalat.

S. J. C. (33/12.)

[Place the magnesium carbonate in a mortar, pour on it the oil of cassia, and enough water to make a thin paste, triturate, add gradually more water to make up to 3viij., transfer to a phial, add the benzol, and shake. The result looks first-rate. Be sure to use the *light* magnesium carbonate.]

##### A Question of Safety.

SIR,—We have had the following prescription to dispense. The first time we refused to dispense it as written, but added water so as to redissolve the iodide, and sent it out as a clear mixture. The patient was agreeable, and said she would ask the doctor if he would mind this when she called on him again. He has now given her to understand that he wishes to have the prescription made up as written. Should we be safe in doing this with a "Shake-the-bottle" label on?

Liq. hydrarg. perchlor. ... 3j.  
Liq. arsen. et hydrarg. iodid. ... 5iv.

Ft. mist.

Sig.: 10 or 15 drops three times a day, after food, in water.  
"Poison, with care."

P. W. (31/65.)

[When the prescription is dispensed as written, the solution of the iodides being added to the solution of perchloride, the precipitate is so fine, and settles so slowly after having been shaken up, that the doses can be dropped or measured without any fear of inequality of distribution. The water in which the medicine has to be taken will dissolve up the precipitate so that the patient will actually swallow it in solution. We therefore see no objection to the prescription being dispensed as written. We think you should have consulted the prescriber in the first instance.]

#### Legal Queries.

For concise statements respecting various Acts which affect directly or indirectly the Chemical and Drug Trades, see the "*C. & D. Diary*," 1908, p. 456; Stamped Medicine Law, p. 435; Pharmacy and Poisons Law, p. 448; and Patents Law, p. 442.

*G. W. E.* (34/15).—In virtue of the fact that the medicinal ingredients are stated on the label of "Q. C. A. for colds, influenza, etc.," it is exempt from medicine stamp-duty. "Phosphorised tonic-drops," recommended "for indigestion, nerves, etc.," is liable to duty unless you state on the label what are the medicinal ingredients, or mention the published formula—*c.g.*, "P.F., 909."

*E. M.* (31/29).—Witch-hazel extract is not an entire drug, consequently if you sell it with a recommendation for sore eyes, etc., it comes within the general charge of medicine stamp-duty; but if you describe it as "Witch-hazel extract" you may sell it unstamped as a known, admitted, and approved remedy, recommending it for ailments.

*Inquirer* (36/63).—Turn up the *C. & D. Diary*, p. 448, and read the article on poisons and pharmacy laws, which is inserted so that points such as you put may be ascertained without correspondence. There is no 1909 Pharmacy Act: the Bill to which you apparently refer is before the House of Commons still.



## Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months. A preliminary condition for reporting on samples submitted is that all particulars as to source and uses are given to us.

*Cascara* (Belfast) (18/1).—We object to assist anyone in penetrating practical jokes with drugs.

*Nemo* (107/26).—The book which has been forwarded to you covers your immediate requirements. We shall be glad to hear from you when you need something more specialised.

*T. N.* (22/48).—See the list of books published in our Educational Number.

*Humboldt* (24/5).—If you address Mr. G. S. V. Wills, Westminster College, 402 Clapham Road, London, S.W., he will probably be able to supply you with materia medica specimens at 5s.

*Panama* (24/33).—For the book you require on physics, kindly refer to the list on p. 293 of the *C. & D.* for August 15.

*Nemo* (28/56).—PAREGORIC FLAVOUR.—For old-fashioned chest-tablets you should use a modification of the B.P. ingredients, such as—

Oil of anise ... ..	3j.
Benzoic acid ... ..	3j.
Camphor ... ..	3j.
Rectified spirit to ... ..	3vj.

Dissolve the solids in  $4\frac{1}{2}$  oz. of spirit, add the oil of anise, and make up to 6 oz.

*O. T.* (16/65).—MINERAL CHEMISTRY.—The following institutions give instruction in geology, under which heading your course of study is included:

The Imperial College of Science and Technology, Exhibition Road, London, S.W., which would be the best for day classes (36l. per annum). King's College, Strand, London, W.C., and University College, Gower Street, London, W.C. The former gives Associateships and use of letters denoting same after a three years' satisfactory course. Birkbeck College, Bream's Buildings, Chancery Lane, London, W.C., and South-Western Polytechnic, Manresa Road, Chelsea, London, S.W., have evening classes, but no diploma is granted. However, the courses cover the requirements for internal students at the University of London.

Useful books on minerals are: Fletcher's "Descriptive Guide to the Museum of Practical Geology" and Bauerman's "Descriptive Mineralogy." Special instruction on petro-liferous deposits is practically not obtainable in England. You should consult Redwood and Thomson's book on "Petroleum."

*A. K. M.* (29/32).—SPICED ACETIC ACID:

Ginger and pimento, of each ...	3ss.
Curry powder ... ..	3j.
Black pepper ... ..	3ij.
Capsicums ... ..	3ss.
Mustard seed ... ..	3iv.

Bruise all together and macerate for a day in—

Acetic acid ... ..	3xvj.
--------------------	-------

Then add—

Boiling water ... ..	Oiliss.
----------------------	---------

Infuse for two hours and strain.

*F. S. C.* (28/2).—An account of the APOTHECARIES' ASSISTANTS' EXAMINATION was published in our Educational Number for 1907. We rarely receive such accounts, and would be glad to have one or two recent "experiences."

*H. K. J.* (30/41).—The award of a prize to anyone in our prescription-problem competition does not preclude from subsequent participation in this.

*L. A.* (34/43).—PROTARGOL was introduced in 1897. We find in the *C. & D.*, January 15, 1898, a query from a Mentone subscriber who asked about it, saying that he had "a prescription for it dispensed at a pharmacy in Zürich," and we replied: "Protargol is a silver compound introduced a few months ago by F. Bayer & Co." etc. It was not until May of that year that notes on the remedy began to appear in English medical journals.

SEPARATING WOOL FROM COTTON.—*Mr. T. M. Smith*, in further reply to "H. B. M.," writes: Boil cloth in strong solution of caustic soda in water for a minute or so, when the soda will dissolve out the wool and leave the cotton in the form of a skeleton. Real "Scotch tweed" completely dissolves.

## Dental Notes.

By L. D. S.

## Antiseptic Mouth-washes.

## Carbolic.

Carbolic acid ... ..	2 parts
Glycerin ... ..	3 parts
Chloroform ... ..	1 part

Five to 10 drops in a wineglassful of warm water.

Liquor potassæ ... ..	3j.
Acid. carbolic. liq. ... ..	3j.
Glycerini ... ..	3ss.
Tr. cocci ... ..	q.s.
Aquam ad ... ..	3iij.

A teaspoonful to a tumbler of water.

## Benzoic.

Benzoic acid ... ..	gr. v.
Thymol ... ..	gr. j.
Peppermint oil ... ..	mv.
Tincture of eucalyptus ... ..	3j.
Alcohol ... ..	3j.

A teaspoonful to a tumbler of warm water.

Professor Miller recommended the following:

Thymol. ... ..	gr. iij.
Acidi benzoici ... ..	gr. XLV.
Tr. eucalypti ... ..	3ss.
Olei gaultheriæ ... ..	gr. xxv.
Spt. rectificat. ... ..	3iv.

To this mercuric chloride gr. vij. may be added if desired.

## Salicylic.

Acid. salicylic. ... ..	gr. x.
Ol. menth. pip. ... ..	mv.
Tr. lavand. co. ... ..	gr. xxx.
S.V.R. ... ..	3ss.
Aquam ad ... ..	3j.

A teaspoonful to a tumbler of warm water.

Another prescription for the relief of fetid mouth:

Saccharin. ... ..	
Sodii bicarbonat. ... ..	aa. gr. xv.
Acid. salicylic. ... ..	3ss.
Alcohol. ... ..	3iiss.

A few drops in a glass of water, to be used as a gargle.

## Saponic.

Cort. quillaie ... ..	3j.
Rad. pyrethri ... ..	3j.
Rad. iridis flor. ... ..	
Cort. cinnamomi ... ..	
Acid. benzoic. ... ..	aa. 3j.
Acid. tannici ... ..	3ss.
Pulv. boracis ... ..	3ss.
Cocci cacti ... ..	gr. xxiv.
Sacch. alb. ... ..	3ij.
S.V.R. ... ..	3vj.
Aque ... ..	3x.

## Antiseptic.

The following prescription is recommended by Dr. Truman, of Philadelphia, as an oral deodorant:

Hydronaphthol ... ..	gr. xv.
Alcohol ... ..	3j.
Distilled water ... ..	3j.

One teaspoonful in a tumbler of water.

## Astringent.

An excellent astringent tincture is made up of the following:

Tr. myrrhæ ... ..	3iiss.
Tr. cardamomi co. ... ..	3j.
Tr. cinch. co. ... ..	3iiss.
Ess. caryophylli ... ..	3ss.
Chloroform. ... ..	3j.
Aq. coloniensis ... ..	3ss.

One teaspoonful to the tumbler of water.

Another astringent tincture for the gums:

Tr. cinchonæ, krameria, myrrhæ, et camphoræ ... ..	aa. 3j.
---	---------

One teaspoonful to the tumbler of water.

## Neuralgia.

ACCORDING to Goldam ("New York Medical Journal," June, 1908) injections of 2 to 10 minims of chloroform with aseptic precautions act almost as a specific in the many different forms of neuralgia. Its action he explains on the theory that "neuralgia is the cry of the nerves for blood."